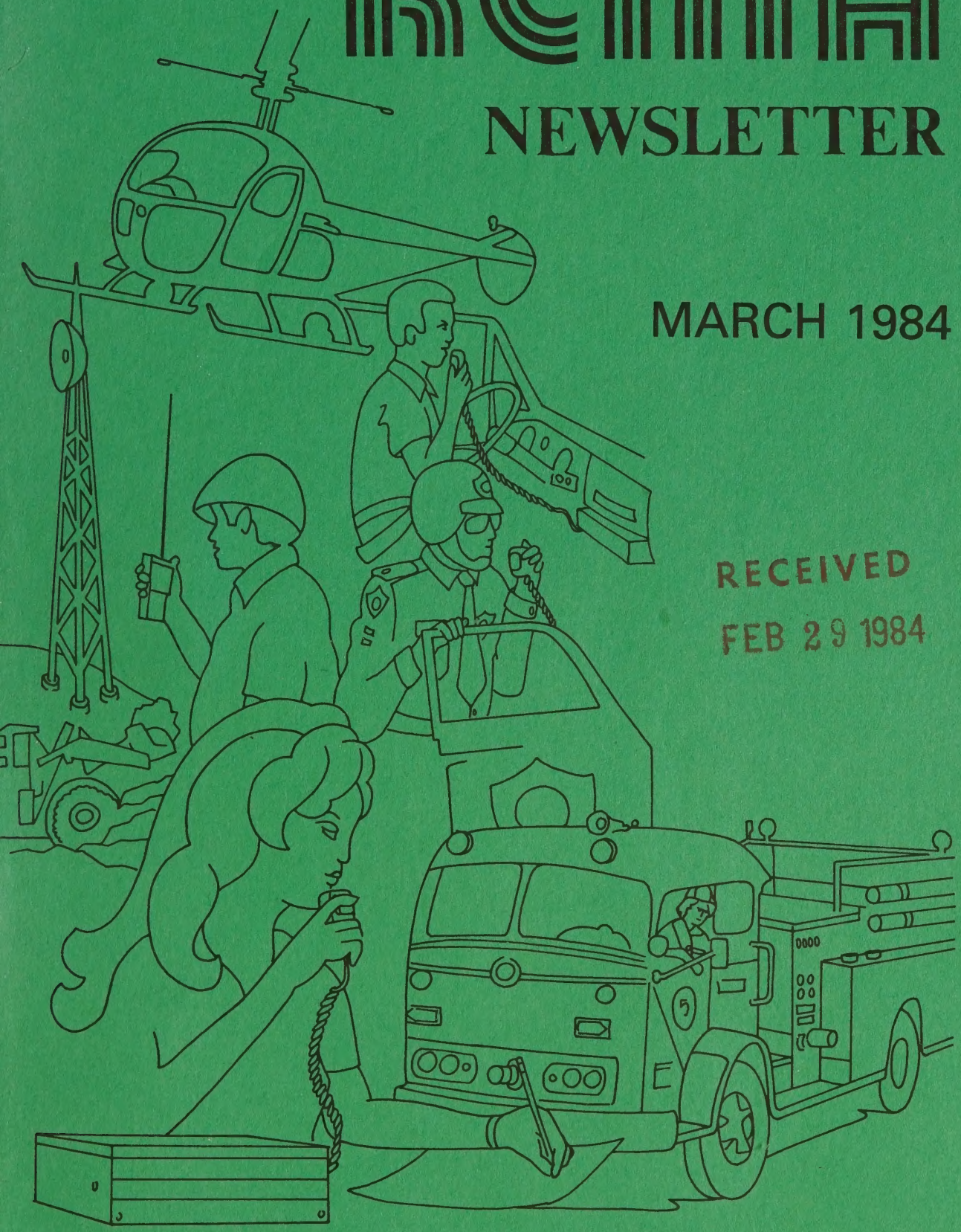
AIS - Get Book

RCMA

NEWSLETTER



MARCH 1984

RECEIVED
FEB 29 1984

FIRST NATIONAL AND INTERNATIONAL ORGANIZATION
OF MONITOR RADIO LISTENERS

RCMA BOARD OF DIRECTORS

SECRETARY

Bill Ell (CA-LA-185)
2831 Hermanos St.
Pasadena, CA 91107

TREASURER

Mike Lussier (ID-001)
P.O. Box 3962
Santa Fe Springs, CA 90670-1962

RCMA NEWSLETTER

GENERAL MANAGER
Editor • Business Affairs • Advertising

Carol E. Ruth (CA-OR-100)
P.O. Box 542
Silverado, CA 92676

ASSISTANT EDITOR

Ginny Slick (MD-012)
1 West Potomac
Williamsport, MD 21795

RCMA REPRESENTATIVES TO THE ASSOCIATION OF NORTH AMERICAN RADIO CLUBS

Jerry Short (CA-OR-002)

FOR YOUR INFORMATION:

1. All club business, unless otherwise noted, must be addressed to R.C.M.A. General Manager, P.O. Box 542, Silverado, CA 92676. This includes matters that relate to renewals, changes of address, newsletter delivery problems, joining the club, etc.

2. Input to the RCMA Newsletter must be mailed to the proper editors, whose addresses are included in the individual column headlines. If no particular column seems appropriate, send input to RCMA, 1 West Potomac, Williamsport, MD 21795.

3. To forward a letter to a specific RCMA member whose address you do not know, put your message to that person in a stamped envelope with your return address on it; mail to RCMA General Manager, P.O. Box 542, Silverado, CA 92676.

4. Please include your RCMA membership number with all correspondence to newsletter editors or club headquarters.

5. If you require a reply when writing to RCMA headquarters or to one of the editors, you MUST enclose a self-addressed, stamped envelope.

6. Please write on only one side of the paper.

7. Please don't combine in one letter several items that should go to different addresses.

8. If you want to type what you submit to the newsletter, please don't exceed a seven-inch column width and please single space. Doing this may save an editor from having to retype the material. Please don't use script type.

9. Your RCMA membership number and expiration date appear on your newsletter mailing label.

10. You may join or renew your membership for ONLY one year at a time.

11. RCMA accepts paid advertising. For information on advertising rates and mechanical requirements, contact Carol Ruth, RCMA Advertising Manager, P.O. Box 342, Silverado, CA 92676.

RCMA NEWSLETTER
Issue 97 March 1984
© Copyright. All rights reserved
RCMA, P.O. Box 4563, Anaheim, CA 92803

TABLE OF CONTENTS

AIRCRAFT..... 7
ANARC NEWS..... Ø
BEGINNERS CORNER..... Ø
BELOW 30 MHz.....11
BUSINESS, ETC.....10
CALENDAR..... 2
CANADA.....17
COMMUNICATIONS PROFILE.....21
CONTACT/INFO WANTED.....23
FCC TOPICS.....25
FEDERAL GOVERNMENT/MILITARY.....27
INTERNATIONAL.....31
LOW BAND SKIP..... Ø
MARKETPLACE.....33
MONITORING AND THE LAW..... Ø
NEW MEMBERS LIST.....87
PHOTO DEPARTMENT.....34
PUBLIC SAFETY:
CALIFORNIA.....70
GREAT LAKES..... Ø
NORTH CENTRAL.....58
NORTH EAST.....47
SOUTH CENTRAL.....52
SOUTH EAST.....40
WEST.....62
RAILROADS.....74
SPACE COMMUNICATIONS.....77
SPECIAL FEATURE..... Ø
TECHNICAL TOPICS.....80
THOUGHT WAVES..... 4
VHF MARINE.....84

ATTENTION!

TO ALL RCMA MEMBERS AND PROSPECTIVE MEMBERS -

PLEASE ADDRESS ALL FUTURE CORRESPONDENCE (INQUIRIES ABOUT MEMBERSHIP, RENEWALS, ADDRESS CHANGES, DELIVERY OR RENEWAL PROBLEMS) TO:

CAROL RUTH
RCMA GENERAL MANAGER
P.O. BOX 542
SILVERADO, CA 92676

CORRESPONDENCE SENT TO RCMA'S ANAHEIM POST OFFICE BOX WILL STILL BE ANSWERED, BUT THERE WILL BE A 4 - 6 WEEK DELAY.

The RCMA Newsletter is published monthly by members of the RADIO COMMUNICATIONS MONITORING ASSOCIATION, P.O. Box 4563, Anaheim, CA 92803. Subscription rate/membership fee is $16.50 for U.S. residents. For persons in other countries, the following rates apply: Canada and Mexico—$18.50; Europe—$20.00, South Pacific and Asia—$21.50. These dues are payable in U.S. funds and are subject to change. Information contained herein is obtained primarily from members and does not necessarily present the position or reflect the opinion of RCMA as a whole. The RCMA does not necessarily recommend or endorse products or services advertised herein. The publication is copyrighted © . Reproduction of any material in this newsletter is prohibited without prior written consent.

•• Calendar ••

Send notices of upcoming events for the Calendar section to:
John Clark, RCMA, P.O. Box 4653, Anaheim, CA 92803.
Please send notices well in advance of the Newsletter deadline.

Greater L.A. Area R.C.M.A. Eric Christensen CALA045 Presiding
714 - 549 - 9333

NOTE: Starting in February 1984 meetings will be held on the fourth Friday of the month.

February 24 FRIDAY Meeting at Mercury Savings and Loan, Valley View and Lincoln, Buena Park, Ca 8:00PM. 2nd Floor. Elevator in back.

Demonstration of the new Electra Bearcat Model 2100 + software The scanner designed to be used in conjunction with a home computer.

Electra representative Mr Ken Wise will make the presentation.

The Bearcat Compuscan 2100 computer control scanner will be a link between the home computer and the scanner hobby. The Compuscan 2100 is the first scanner radio designed as a peripheral for today's personal computers. It can monitor up to 200 channels under computer control. The SEARCH/STORE/COUNT features and three different priority levels as well as several computer displays in color are available. R.C.M.A. is to be one of the first groups to obtain such a demonstration.

March 23 FRIDAY Tentative Tour of Orange County Communications Center 400 The City Drive, Orange, CA

The nerve center of Orange County public safety communications is always an interesting tour, and it has been three years since we visited this location.

April 27 FRIDAY Meeting at Mercury Savings and Loan, Valley View and Lincoln, Buena Park, Ca 8:00PM. 2nd Floor. Elevator in back.

A shortwave session. Bring your shortwave rig for comparisons, and selected frequencies for sharing.

May 25 FRIDAY Meeting at Mercury Savings and Loan, Valley View and Lincoln, Buena Park, Ca 8:00PM. 2nd Floor. Elevator in back.

Discussion and demonstration of computerized frequency lists. Problems with creation, updating, correcting and selection by various criteria will be covered.

R.C.M.A. Chicago

Contact Edward Robert Sirovy IL-004 312 969 2856
311 S. Williams Street, Westmont, Il 60559

Meetings: NANCINI'S Resturant 5555 St Charles Road, Berkeley, Il two blocks east of St Charles Road exit from Eisenhouer Expressway Extention I-290 (phone 312 544 7277)

Saturday	March	4, 1984	1:00 PM
Saturday	April	14, 1984	1:00 PM
Saturday	June	9, 1984	1:00 PM
Saturday	August	4, 1984	1:00 PM
Saturday	August	19, 1984	Picnic/Field Exercise *
Saturday	September	22, 1984	1:00 PM
Saturday	November	10, 1984	1:00 PM

*Write for time, map, and details of this fun day

Visitors are welcome but please confirm the date in advance. A SASE on file assures notification of tours and other item which may be scheduled on short notice.

Calendar continued

All Ohio Scanner Club
Jerry Callam OH-14 President
10 Avalon Road, Mt. Vernon, Ohio 43050

Austin Area Radio Listeners Meeting
Contact Bob Shrader (512) 926-9516

Golden Gate Communications Association
James Zuchelli CAST001
P.O. Box 1861 Modesto, CA 95353

Meetings at Hayward Library
Mission & C Streets, Hayward

R.C.M.A. Philadelphia Gerald M. Schoaf, Floyd Schoenberg, C. Willard Load
PA-036 PA-076 PA-164
P.O. Box 213, Upper Derby, PA 19082 (215) 356-1982

Meeting the first Monday of the month,. 7:30 PM at

Saint James Church Next to "The Grange"
Corner of Myrtle Ave & Warwick Road
Haverford, PA 19083

Talk In On: CB Channel 9 GMRS 467/462.675 Hams 147.66/.06

R.C.M.A. Connecticut Chapter

Contact Bill Moore CT 038 203-223-0840
950 Farmington Ave, New Britain, CT 06051

Southern New England Scanners Club

Contact Robert Murphy SNEC President 401-353-0208
P.O. Box 1591, Pawtucket, RI 02862

R.C.M.A. Minneapolis-St. Paul Area

Contact: Chuck Steier MN-008 (612) 927-9253
4820 Hwy 7, Minneapolis, MN 55416

A SASE on file assures notification of chapter activities
(tours, gatherings, etc) non members are welcome to attend.

NEED BACK ISSUES OF THE RCMA NEWSLETTER?

Lots (Months/Year)	No. of Issues	Price
Sept 75 - June/July 76 (No Oct or Nov published)	7	$2.00
August - Dec 76 (No Oct published)	4	$3.00
Jan - June 77	6	$4.00
July - Dec 77	6	$4.00
Jan - June 78	6	$5.00
July - Dec 78	6	$5.00
Jan - June 79	6	$6.00
July - Dec 79	6	$6.00

1980-83 issues are available at $1.50 per copy.

Order Total	Include This Amount of Postage
$ 1.50 - $ 5	$1
$ 5.50 - $10	$2
$10.50 - $15	$3
$15.50 - $25	$4
$25.50 - $35	$5
Over $35	$6

Send your request & check/ M.O. (payable to RCMA) to Secretary Bill Ell, 2831 Hermanos St., Pasadena, CA 91107

THOUGHT waves

Ginny Slick, RCMA Assistant Editor, 1 West Potomic, Williamsport, MD 21795

The 100th issue of our club newsletter will soon appear in your mailbox. The approach of this milestone has led me to remembrances of times past and to the reaffirmation of my belief that every area of the newsletter depends so heavily upon the membership.

Many years ago I read a few lines in the literature that came with my BC-250 and discovered that there was a club forming in California for scanner hobbyists. I sent for a sample of their newsletter and found it very entertaining, so I joined RCMA. Newsletters began to lead me into new areas of listening. They taught me how to program 'out-of-band' so that my scanner brought in more than its advertised frequency limits.

Following the advice of an article in the newsletter, I began to catalog the frequencies I listened to. I wrote down what I heard but didn't understand. Soon I began to have questions on things I heard. I asked them of the editor at that time, Iden Rogers, who put me in touch with someone who helped me to identify what I was hearing.

The minute I put myself in touch with our membership, I began to learn even more about what to listen to. Members were busy making their own compilations of area frequencies, often more accurate than the outdated professional lists. The newsletters began to publish more reader contributions, slowly developing into the product that reaches you today.

Members of RCMA have branched out into the areas of invention and production of scanner accessories, and naturally, we knew of it first. Being a member of RCMA opened many doors and led in many directions. For my part, I found that these people were caring and honest when I dealt with them.

The money I first sent to Anaheim has certainly brought me much, much more than I could ever have foreseen. It has brought me countless pen pals and provided me with endless knowledge about our hobby. It's no surprise to me that we're nearing our 100th issue. With a membership as loyal as ours, I'm sure we'll reach our 200th. I'm sending special thanks to all those members who make it a practice to send in information; to those members who have acted in editorial capacities, to those who were club officers, and to the founding fathers who opened the doors of their little club to the world.

Write soon,

Ginny

YOUR THOUGHTS

1 West Potomac, Williamsport, MD 21795

To the editor:

I agree with H. Vandegrift's comments in December RCMA. 10-codes get too much play in the newsletter. Also, his idea to list contributors' addresses is a great one.

Next, I must disagree with the advertisements which run every month within the railroad column. These editors should pay for this situation--are they doing so?

Also, why is "marketplace" taking so long to get published? Is it backlog? My ad,,submitted in June, got published in Dec.

Jeff Shinn(ID-010)

To the editor:

I've been enjoying "Thought Waves" since its inception and thought I would add a little fuel to the Regency continuous coverage controversy(Does it or doesn't it?). Enclosed is a letter that I received from Regency in reply to my query on two product sheets, one for the MX7000(also enclosed) and the other for the HX3000 which showed quite a few gaps in coverage, that I had sent to Mr. Diebold , asking him for an explanation.

As you can see, Regency's answer was that the product sheets list the common bands only and that both have continuous coverage. This was also verified by the local Regency rep. So, unless there has been another change in the specs, I would go for the latter info.

Another option would be a phone call or letter to Regency at 7707 Records St., Indianapolis, Indiana 46226-9986. Tel.-317/545-4281, perhaps from your office or an RCMA Indianapolis member. Since the MX7000 now has an April release date, I'm certain that Mr. Diebold's Office would verify the correct coverage.

Rene(CASC-018)

Regency ELECTRONICS, INC.

7707 RECORDS STREET • INDIANAPOLIS, INDIANA 46226-9986 • TEL (317) 545-4281

August 24, 1983

Mr. R.G. Borde
748 Harvard Ave
Sunnyvale, CA 94087

Dear Mr. Borde

Thank you for your inquiry on our MX7000 and HX3000 scanner. Unfortunately, some of the information you requested is currently unavailable, but I can answer a few questions.

The first question you asked concerns the continuous scanning. Yes, the units do scan continuously. The product sheets list the common bands only. The units will have AM.FM selectability throughout their entire ranges, and AM & FM can be scanned together.

More information will be available as the units get closer to production.

Sincerely,

REGENCY ELECTRONICS, INC.

Marc E. Diebold
Advertising Coordinator

To The Editor:

Anyone having an Apple II type computer might be interested in a free program for keeping track of their scanner frequencies. The program will list, print, search, delete, save or sort your frequency list. Each list of frequencies can have 1000 entries, and you can have as many lists as you have disks (or tapes). The program loads the entire frequency list to memory so sorts and searches are extremely fast. The program is written in integer basic and will run on any Apple II, II+ or IIe. The SCANNER program is free to anyone who sends a blank disk and return postage to me. If you are a TRS80 owner, a similar program is available from the PAT100 SCANNER BBS in New York, they can be reached at (212)-991-1664 for modem downloading or you can leave a message to the SYSOP and make an arrangements to get a disk or hard copy, tell him you are a RCMA member.

TOM MADRACKI (CAOR250)
1260 NEWCASTLE LANE
FULLERTON, CA. 92633

To the editor:

The enclosed "letters to the editor" are from the August 1983 APCO Bulletin. I thought you might be interested in the first two letters. They refer to an incident in Minneapolis in which a television news program rebroadcast, without permission, taped radio transmissions of an ambulance company.

This obviously violates federal law, but they apparently feel that, as a news operation, the law does not apply to them. It would be interesting to see WCCO-TV's reaction were another station to rebroadcast radio traffic between WCCO-TV and its news crews. Somehow, I can just hear it: "But that's different."

Sincerely,

Gary S. Brown

TV STATION IN VIOLATION OF FCC RULES

Federal Communications Commission
Washington, D.C.

Gentlemen:

WCCO-TV serving the Minneapolis/St. Paul and surrounding areas recently aired a series of reports.

In the first edition, they aired actual radio transmissions of a private company which they had admitted to taping earlier. Along with these transmissions, they superimposed the wording of the transmissions in quotes against the background of monitors. A call to the company concerned revealed that it had not given permission-either verbal or written-to WCCO to reproduce these transmissions on their TV station.

On 11 May 1983, a meeting of the Minnesota Chapter of APCO was held. At this meeting, concern was expressed that a serious violation of FCC rules and regulations had taken place-and that if action was not taken, the news media might feel free to use any and all radio transmissions to add sensationalism to stories in which two-way radio is involved.

FCC rules and regulations 73.1207 (C)-(1) state in part that "the broadcasting of messages originated by privately owned non-broadcast stations may be done only upon the permission of station licensee and with prior authorization from the FCC in Washington, DC."

The Minnesota Chapter of the Association of Public Safety Communications Officers, Inc. unanimously voted to request the FCC to look into the practices of WCCO-TV and take the appropriate action if in fact, violations of FCC Rules and Regulations are indeed found to have occurred.

The Minnesota Chapter of APCO does not have an opinion on the issues of the reports themselves. It's only concern is that proper radio broadcasting protocol be adhered to and that rules be enforced equally amongst all users.

W.H. Schwartz
Secretary/Treasurer
Minnesota Chapter of APCO

MN CHAPTER REGISTERS PROTEST TO FCC

Editor:

The following letter was sent to the FCC to protest the action of a local television station. In the course of investigating and reporting on the apparent impropriety of a private ambulance service, the television station re-broadcast radio transmissions (which they monitor) between the ambulance dispatchers and ambulances. While the Minnesota Chapter did not take a position on the merits of the report itself, it was felt that the action of the station in violating FCC rules by broadcasting private radio communications on television could not go unnoticed or sanctioned strictly in the name of "journalism".

We are all subject to error. And we in public dispatching are particularly vulnerable due to the large volume of critical communications handled daily. Oftentimes the media takes us to task for our performance. However, let us hope it does not progress to the point where "journalism" can be allowed to violate Federal law.

William H. Schwartz
Secretary/Treasurer
Minnesota Chapter of APCO

To the editor:

I would like to take a moment to convey my thanks to all those members who answered my plea for information for my vacation trip. I was planning what turned out to be a five week, 8,000 mile, cross country round trip, and requested local frequency information for the areas along my route. Something like fifteen to twenty members answered my request.

True, I could (and did) take along my Police Call volumes, but there are so many variables that can make that information a waste of time: licenses granted but not in use; which state police freqs are used for highway patrol?; local govt. listings that are used for PD, FD, etc.; and of course, Police Call doesn't list everything - D.O.T., Forestry, A.T.C., etc. Also, it's alot easier to glance at a pre-made list of frequencies for a certain area, rather than trying to flip through the pages of a frequency directory while traveling from one area to the next. Besides, personnal frequency lists are usually more detailed and more reliably accurate than published lists.

I found the Canadian membership the most willing of all to share their information. Althe only three Canadian members responded, they sent by far and away more information than all other members combined. One Canadian member sent six full pages of hand written information covering both sides of each page.

Again, my thanks for making my trip more enjoyable. I stand ready to help anyone who requests information from my area.

Mike Consalvo(CARI-011)

Aircraft

Send private, commercial, firefighting and law enforcement aircraft frequencies of interest in the 108-136 MHz range and frequencies in other bands above 30 MHz associated with airports and aircraft plus questions, articles and tips related to aircraft monitoring to:

Darrel Charest, 1804 D Oak Creek Lane, Bedford, TX 76021

Spring fever is one of my favorite illness' and I'm afraid that time of year is rapidly approaching. After what has been a horrible winter for much of the country the warmer temperatures are most welcome, even if they do bring thunderstorms and occasional tornados. Never again will I complain about the hot weather regardless of how hot it is, if only we can be spared the cold that seemed to break records all over the country.

During most of the winter my attempts to solve the mysteries associated with the heater system in the Aztec have ended in almost total failure. In theory it really isn't that complicated - five push/pull controls, a valve controlling the fuel and a three position switch for the fan should make it a straight forward operation. One of the push/pull controls is labelled thermostat. Don't you believe it! It's on or off. When it's on the air flow is like a blast furnace. Anything less is an Artic deep freeze! If only there were an in-between setting. Summer can't come too soon!

Winter does provide the Instrument student pilot with the opportunity to fly in actual conditions instead of using the hood. Several weeks ago we were getting is some approaches to a nearby airport, with weather conditions just above minimums. We knew from the weather reports we could expect more of the same at home. The student (an Instrument Instructor candidate) made a very good approach and as we arrived at minimums I could see the freeway below me which is just off the end of the runway, but I couldn't get a glimpse of anything ahead. Missed approach and back for another try. Then as we began our climb out it occurred to me we didn't have the windshield defroster on! On the next approach the strobe lights and runway appeared right where they were supposed to be, directly ahead, for an uneventful landing.

Thanks again to you the mail bag was full with many interesting letters and many frequency listings.

From St. Louis, Charles L. Epps, MO-017, wrote to say that he enjoyed listening to the aircraft band, but found it difficult to arrange time to do so. He also had some problem in locating frequencies that would provide for interesting listening, often hearing only one side of the conversation, in most cases that of the pilot. So for Charles benefit we will list some frequencies that he can use.

From Palatine, Ill. Jim Cavanagh (IL-060) passed along an article he ran across in the Armed Forces Journal International concerning the Coast Guard and their use of the Aerospatiale Dauphin helicopter in search and rescue operations. This helicopter is produced by a French company and manufactured in Grand Prarie, Tx. just southwest of Dallas and within easy range of my Regency scanner. The article gives some details on the helicopter with regard to range, performance, weight and similar data and recommends that other services consider purchasing this machine, because of its excellent features and performance.

From Santa Cruz, Ca Dennis Smith, CASZ006 wrote to ask for information concerning on board computer systems in our jet fleet, specifically the B-747, DC-10 and L-1011. Except for the INS (Inertial Navigation System) or RNAV (Area Navigation) systems aboard these aircraft, I am not aware of any computer systems on these aircraft. However, the newest Boeing aircraft the 757 and 767 do have extensive computer systems that perform all kinds of duties for the entire flight. An excellent article on these appeared in the "Radio Electronics" magazine about six months ago, but my issue went with other discards when I moved during Labor Day. It would be a good bet the local library would have a copy of this issue.

From Ft Meade, Md. E. Flynn, provided some fascinating material related to "Concorde" flights to and from the Wash. D.C. area. The aircraft uses the call sign "Speedbird" and the flight number e.g. 188, and was cleared to a block altitude FL550 to FL590. In other words the aircraft is not given a specific altitude assignment but is permitted to operate between 55,000 and 59,000 feet. As fuel is burned, the aircraft climbs to a higher altitude. Time enroute from Dulles to Heathrow 3+00, three hours, that's hardly time to get set comfortably in your seat! These flights operate Wednesday, Friday and Sunday. Specific frequencies used will appear at the end of the column.

From Dunedin, Fla. Joe Lewis, MD-015, wrote with some frequency listings, which appear at the end of this article. Joe has been a regular contributer to this and other articles in the Newsletter and I'm sure the other Editors and readers appreciate his efforts as much as I do.

From Florida again, our Public Safety Editor Southeast, Bill Mauldin, forwarded some aviation frequencies sent to him by a new member James B. Rouse, Kinston, N.C. NC-055. From his contribution, it is evident James spent a good deal of time and effort compiling this list.

Our Pan American Airlines Captain, who asked to remain anonymous, submitted some charts with extensive frequency listings for most of the U.S., Mexico and the Carribean. The print is too small to be legible for our Newsletter so these will be included periodically until we've gone through the listing.

Here is the record of the Concorde flight submitted by E. Flynn.

Call sign Speedbird 188
Route Dulles to Heathrow
Date/time 1500Z (1000 EST) 11 December 1983

ATC Facility	Frequency	Position
DUL Tower	120.1	Dulles
DUL Departure	126.1	
BAL Approach	125.3	Baltimore
Washington Center	133.9	

Aircraft continued

Washington Center	134.2	Kenton
Washington Center	133.8	
New York Center	132.15	Sea Isle
New York Oceanic	8825 HF	40N 67W

Cleared to Block altitude FL550 to FL590 (55,000-59,000)
Time enroute 3+00

Frequencies that follow were obtained from ARINC by Joe M Lewis for the Washington, D.C. area

Company	Frequency	Area
Delta	131.85	Wash. National
Eastern	131.0	"
	130.45 Airborne	"
	131.4 Ramp	"
TWA	130.62 (Not 129.2)	"
American	129.2	"
United	129.3	"
Northwest	131.7	"
	130.35	"
U. S. Air	130.5	"
United	129.3	Dulles
American	129.2	"
Pan American	129.7	"
Western	130.55	"
Eastern	130.9	"
United	460.65	Wash. National
Piedmont	460.8	"
Delta	460.825	"
Eastern	460.75	"
TWA	460.675	"
U. S. Air	460.7	"

The following frequencies are for the St. Louis area and are taken from the U. S. Government Airport Directory.

Lambert International Airport	Frequency
Tower	118.5
	120.5
Approach Control	126.5
	125.15
	123.7
	120.05
Departure Control	118.95
	127.25
	124.9
Clearance Delivery	119.5
ATIS	120.45
Ground Control	121.9
	121.65
St. Louis FSS	122.6
	122.45
	122.2
Arrowhead Airport Unicom	122.8
Approach Control	126.7
Clearance Delivery	118.0
Creve Coeur Airport Unicom	122.8
Approach Control	126.7
Clearance Delivery	118.0
Spirit of St. Louis Airport	
Tower	118.3
Ground Control	121.7
ATIS	134.8
UNICOM	122.95

Aircraft continued

Weiss Airport	
Approach Control	126.7
Cleveance Delivery	126.8
Unicom	122.8

See you next month. My correction tape for the typewritter has ran out so it is time to wrap this up.

Business, Etc.

This column is for reporting frequency and radio system information for the following varied services: business, forest products, petroleum industry, special industrial, manufactureers, news media (behind-the-scenes radio, TV & newspaper), motion picture industry, security (private patrol, detective agencies, campus security & police, amusement park & stadium security, shopping center & mall security, plant/business/hotel security, etc.), General Mobile Radio Service (GMRS), mobile phone/RCC & paging, trucking firms, bus lines, taxi cabs, tow trucks, utility companies (private & municipal water, power, electric, gas, telephone, etc.), and all school & college related frequencies. Send information and questions pertaining to the radio services covered in this column to: Brandt Niemuth, P.O. Box 541, Rosemont, IL 60018

Greetings from the "Windy City";

Due to the holidays past taking precedence over many things, including contributions, this months' column will be just a little lean. Please remember that if I can not read your contributions, then I can not print them, so please make them legible either in printed form or typewrittrn. In this way I will be able to consider all contributions for publication.

From the Louisiana Frequency Exchange Newsletters (thank you gentlemen for submitting these):

151.685	KQB 738	Cotton's Pest Aid Control	Baton Rouge
154.6		J C Penny (Security)	New Orleans
463.225		Emery Express/Air Freight	Baton Rouge
464.525		Hammond Square Mall	Hammond
153.14	KTP 760	Exxon Chemicals	Baton Rouge
468.8375		B F Goodrich	South Louisiana
467.45		Air Products Chemical Inc	Saint Gabriel
27.45	KZS 492	Ritter Auto Parts Inc	Monroe
30.6	KQU 715	Parish Plantation Inc	Rayville
30.66	KLI 480	Kerr McGee Corp	Morgan City
30.74	KKP 211	Transworld Drilling Exploration	Morgan City
35.7	KRJ 928	Watson Refrigeration Svc	Franklinton
35.18	Paramedic Ambulance Service Ltd (KYZ 630)		Monroe
35.36	WYM 578	Universal Engineering	Baton Rouge
35.1	KCW 889	Bastrop Loan Co	Bastrop
33.18		Chevron Oil Co	Offshore Louisiana
33.26	KKA 563	Tenneco Inc	West Monroe
33.36	KKA 649	Exxon Communications Co	Grand Isle
48.56	KZJ 697	Shell Communications Inc	Saint James
451.825	KUI 481	Air Logistics Inc	Morgan City
451.875	KKW 800	Innis Sugarland Plantation	Pointe Coupe
452.05	WOO 43	Phillips Communications Inc	Cameron
35.16	KWQ 428	Reserve Telephone Co	Reserve
48.28	KKL 634	Bossier Rural Electric Membership	Plain Dealing
48.36	KKD 879	Dixie Electric Membership	Central La
48.38	KKT 984	Red Oak Water Co Inc	Baton Rouge
48.78	KRW 524	United Gas Pipeline Co	Lutcher

As I said, "Just a bit lean this month." Remember that without your help the newsletter will cease to exsist.

Happy Monitoring

BELOW 30 MHZ

Robert Horvitz, editor

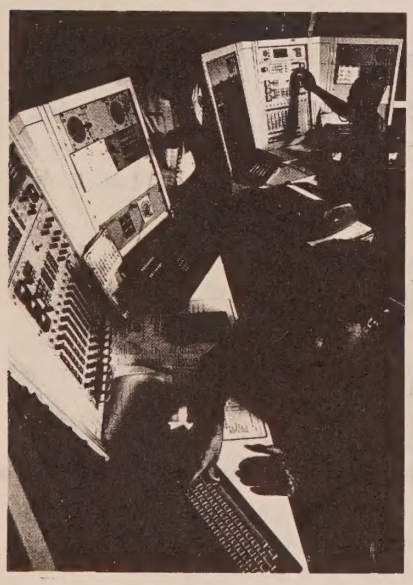
This column is for AM, SSB, RTTY, CW & FAX reception reports, explanatory notes, articles, news & questions related to HF utilities. Services covered in this column include civilian aeronautical, coastal/marine, government, military, weather, etc. – essentially everything except broadcasting, CB & amateur radio. Send to: Robert Horvitz, 54 East Manning St., Providence, RI 02906
If you need a reception report form, please enclose a SASE with your request.

Second OTH-B Radar To be Built

Just before its Christmas recess, the Congress approved $105 million to build another 60° sector of the USAF's Over-the-Horizon Backscatter Radar system. Like the sector already nearing completion, this one will be in Maine, aimed out over the Atlantic. The decision to fund another sector was a compromise between the House, which had voted to delay all further procurement funds until the first sector's performance could be tested, and the Senate, which voted to give the Administration the $194 million it had requested to start two new sectors this year. The FY 85 budget request should be out by the time you read this. It's likely to contain a request for the third sector, not funded in FY 84. The big question is, will it also include a request for authorization/funding to start the West Coast system? An even bigger question is, will the Senate see the wisdom of the House's position, and agree to wait until the first two sectors have proven themselves before more are started?

Best way to follow OTH-B radar development is by reading Backscatter. Issue #3 came out around New Year's. It focusses on the Soviet "woodpecker" and features the ANARC OTH-B Radar Committee's memo to the State Department about ol' Woody, plus a discussion of the new Soviet radar near Abalakovo. Each issue of Backscatter costs 30¢ (payment in US stamps is OK), plus an SASE; or 4 IRCs for overseas delivery. Address: 54 East Manning St., Providence, RI 02906. When ordering, please specify which issue(s) you want: current, past and/or future.

Upgrading in the US...



"Scope Signal III" HF communications station, USAF Strategic Air Command; from the 1983 Annual Report, Rockwell International Corp. (see RCMA, Dec 82, pp. 5-6, for system description and background)

...and in the USSR

"Work on installing AURK radio channel multiplexing equipment on main radio links was done during 1981-82. This device is used to multiplex a single-sideband telephone channel with six 200-baud telegraph channels. Operational testing was done in 1982 on models of the new AURK-2 radio channel multiplexing equipment which will be installed on shortwave main radio communications links at the end of the 11th Five Year Plan. The new AURK-2 equipment is based on integrated microcircuits and can transmit telegraph data at 600 or 1200 baud.

"New types of 20 kW 'Molniya-3' automated single-sideband transmitters have begun to be put into operation at transmitting centers. The Molniya-3 transmitter employs an advanced single-ended circuit, covers the complete shortwave band from 3 to 30 MHz, is equipped with a high-stability exciter and can be set to any frequency within the band automatically.

"ADU-2 remote control and remote signalling equipment has begun to be put into permanent operation at transmitting and receiving centers. This equipment allows groups of ten automated mainline transmitters or receivers to be controlled remotely. The implementation of this equipment at a number of radio enterprises /including the jamming networks? - H/ has made it possible to eliminate several dozen operational duty personnel."

---from an article by Ye. Ye. Dobrovol'skiy, Deputy Chief, Chief Directorate of Space and Radio Communications, USSR, in Vestnik Svyazi, translated in Wordwide Report: Telecommunications Policy, Research & Dev'pmt #278.

...and in Bangladesh

"New radio transmitters for Dhaka International Airport supplied by the UK firm, Rediffusion Radio Systems, will establish direct links with Calcutta and Rangoon, and provide navigational information for aircraft overflying Bangladesh, reports LPS. The

order, worth around £250,000, was placed by Bangladesh's Civil Aviation authority... Six of the company's new T1015 fully solid-state transmitters have now been supplied to Dhaka International... The T1015 transmitter avoids the use of 'lifted' components such as valves, so that no warm-up period is required. It has an independent sideband facility, so that it can transmit voice and teleprinter data simultaneously over the same frequency." --from The New Nation, 22 May 83, Dhaka, via WWR:TPR&D #281

ICAO HF Frequency List

Larry Van Horn had sent an "Urgent Change Notice" issued by the Defense Mapping Agency about the transfer of en-route air traffic control comms for USAF aircraft from USAF stations to the International Civil Aviation Organization stations (see Jan issue). Ian (ENG-005) wrote to say this is due to the closing of the gap caused by the ICAO's slower conversion from AM to USB. Before the conversion was completed (last year), Military Airlift Command aircraft had to communicate with ATC agencies via landlines through USAF Airways stations. Now, says Ian, they "can contact ATC stations in the Aero (R) band directly, reducing delays in position-reporting, no doubt improving air safety." It certainly has cut down on the amount of activity one hears in the Aero (OR) bands, and increased the activity on ICAO channels somewhat. Which is why it seemed appropriate to publish the following list. The information comes from the "Urgent Change Notice" itself, but re-sorted according to frequency. This list includes stations and freqs I hadn't seen on any other list before, including some outside the Aero (R) bands - e.g., Pascua/Easter Island on 8667 and the Central South American stations on 11195. Note also the absence of stations in the socialist countries.

2854 Canaries, Tamanrasset
2878 Kinshasa, Luanda, Lusaka
2887 Barranquilla, Georgetown, Guatemala, Havana, Merida, New York, Piarco, San Andres, San Jose/Coco, San Juan, Tegucigalpa
2896 Seoul
2899 Gander, New York, Reykjavik, Santa Maria, Shanwick
2932 Anchorage, Cold Bay, Tokyo
2944 Asuncion, Buenos Aires, Cordoba, Mendoza, Panama, Resistencia, Salta
2962 Gander, Reykjavik
2971 Bodo, Cambridge Bay, Churchill, Frobisher, Gander, Reykjavik, Shanwick, Sondrestrom
2983 Bodo
2992 Amman, Ankara, Baghdad, Bahrain, Basrah, Beirut, Damascus, Kuwait
2998 Guam, Honolulu, Manila, Naha, Port Moresby, Tokyo
3016 Canaries, Gander, Lisbon, New York, Paramaribo, San Juan, Santa Maria, Shanwick
3411 Kano, Tunis
3413 Honolulu, San Francisco
3419 Tripoli
3431 Beira
3432 Casablanca
3446 Kabul, Karachi, Lahore
3452 Canaries, Dakar, Monrovia, Recife, Rio de Janeiro, Sal, Salvador
3455 San Andres
3467 Addis Ababa, Aden, Asmara, Aukland, Benghazi, Bombay, Cairo, Delhi, Hargeisa, Honolulu, Khartoum, Mogadiscio, Nandi, Sydney, Tahiti
3470 Bali, Calcutta, Colombo, Darwin, Dhaka, Jakarta, Madras, Perth, Ujung Pandang
3476 Cocos, Johannesburg, Kigali, Mauritius, Perth, St. Denis/Gillot
3479 Asuncion, Beirut, Belem, Brasilia, Buenos Aires, Campo Grande, Manaus, Montevideo, Porto Alegre, Porto Velho
3481 Moroni/Iconi
3485 Bangkok, Hong Kong, Manila
4657 Antananarivo, Majunga
4669 Antofagasta, Asuncion, Pascua/Easter Island, Puerto Montt, Punta Arenas, Santiago
4675 Bodo, Cambridge Bay, Churchill, Frobisher, Gander, Reykjavik, Shanwick, Sondre-
4689 Tunis strom
5454 Chiclayo, Pisco, Puerto Montt
5469 La Paz
5493 Brazzaville, Johannesburg, Kinshasa, Luanda, Lusaka, Niamey
5498 Beira
5505 Beira, Seoul
5512 Lahore
5519 Accra, Algiers, Kano, Lagos, Ndjamena, Sao Tome/Salazar, Tamanrasset, Tunis
5520 Panama
5526 Asuncion, Belem, Brasilia, Buenos Aires, Campo Grande, Cayenne, Leticia, Manaus, Montevideo, Piarco, Porto Alegre, Porto Velho

Below 30 MHz continued

5540 Moroni/Iconi
5547 Honolulu, San Francisco
5550 Barranquilla, Caracus/Maiquetia, Cayenne, Georgetown, Guatemala, Havana, Merida, New York, Paramaribo, San Jose/Coco, San Juan, Tegucigalpa
5565 Canaries, Dakar, Recife, Rio de Janeiro, Sal, Salvador
5574 Honolulu, San Francisco
5575 Guayaquil, Quito
5582 Caracas/Maiquetia, Georgetown
5583 Punta Arenas, Santiago
5598 Canaries, Gander, Lisbon, New York, San Juan, Santa Maria, Shanwick
5604 Antofagasta
5616 Gander, New York, Reykjavik, Santa Maria, Shanwick
5628 Anchorage, Cold Bay, Tokyo
5634 Antananarivo, Bombay, Cocos, Johannesburg, Lusaka, Mahe, Mauritius, Nairobi, Perth, Seychelles, St. Denis/Gillot
5643 Aukland, Honolulu, Nandi, Sydney, Tahiti
5649 Gander, Reykjavik
5652 Niamey, Tripoli
5655 Bangkok, Hong Kong, Kota Kinabalu, Kuala Lumpur, Manila, Singapore
5658 Abadan, Addis Ababa, Aden, Asmara, Bahrain, Benghazi, Bombay, Cairo, Dar es Salaam, Delhi, Djibouti, Hargeisa, Jeddah, Kathmandu, Khartoum, Kuwait, Mogadiscio, Riyan, Tehran, Tripoli
5661 Beirut, Malta
5667 Amman, Ankara, Baghdad, Bahrain, Basrah, Beirut, Damascus, Jeddah, Kuwait, Tehran
5673 Rangoon
5680 Niamey
6532 Guam, Hong Kong, Honolulu, Manila, Naha, Port Moresby, Taipei, Tokyo
6535 Abidjan, Canaries, Dakar, Sal
6540 Caracas/Maiquetia
6556 Bali, Calcutta, Cocos, Colombo, Darwin, Dhaka, Jakarta, Kathmandu, Kuala Lumpur, Madras, Male, Perth, Singapore, Ujung Pandang
6559 Nairobi
6562 Manila, Naha, Tokyo
6574 Cairo, Kigali
6577 Barranquilla, Guatemala, Havana, Merida, New York, Panama, Paramaribo, Piarco, San Andres, San Jose/Coco, San Juan, Tegucigalpa
6586 Niamey, San Andres
6603 Windhoek
6610 Casablanca, Monrovia
6617 Chiclayo, Iquitos
6624 Kabul, Karachi, Lahore
6638 Accra, La Paz, Santa Cruz, Tamanrasset
6649 Antofagasta, Asuncion, Buenos Aires, Cordoba, Lima, Mendoza, Panama, Pascua/Easter Island, Puerto Montt, Punta Arenas, Resistencia, Salta, Santiago
6666 Guayquil, Quito
6673 Abidjan, Bamako, Bangkok, Bouake, Dakar, Monrovia, Nouadhibou, Nouakchott
6704½ Belem, Brasilia, Campo Grande, Manaus, Porto Alegre, Porto Velho, Recife, Rio de Janeiro, Salvador
8667 Pascua/Easter Island
8825 Canaries, Gander, Lisbon, New York, Paramaribo, San Juan, Santa Maria, Shanwick
8826 Guayaquil, Kano, Lagos, Ndjamena, Quito, Sao Tome/Salazar, Tunis
8843 Honolulu, San Francisco
8846 San Andres
8847 Georgetown
8854 Moroni/Iconi, Seoul
8855 Asuncion, Belem, Brasilia, Buenos Aires, Campo Grande, Cayenne, Leticia, Manaus, Montevideo, Paramaribo, Piarco, Porto Alegre, Porto Velho, Recife, Rio de Janeiro, Salvador
8861 Abidjan, Bamako, Canaries, Dakar, Monrovia, Nouadhibou, Nouakchott, Recife, Rio de Janeiro, Sal, Salvador
8864 Gander, New York, Reykjavik, Santa Maria, Shanwick
8867 Aukland, Honolulu, Nandi, Pascua/Easter Island, Sydney, Tahiti
8870 Dar es Salaam, Kigali
8873 Brazzaville
8875 Windhoek
8879 Antananarivo, Bombay, Cocos, Dar es Salaam, Gander, Johannesburg, Lusaka, Mahe, Majunga, Mauritius, Perth, Reykjavik, St. Denis/Gillot
8882 Casablanca, Rangoon
8888 Bujum Bura, Nairobi
8891 Bodo, Cambridge Bay, Churchill, Frobisher, Gander, Reykjavik, Shanwick, Sondrestrom

Below 30 MHz continued

8894 Algiers, Niamey, Tamanrasset, Tripoli
8903 Guam, Hong Kong, Honolulu, Johannesburg, Luanda, Lusaka, Manila, Naha, Niamey, Port Moresby, Taipei, Tokyo
8918 Amman, Ankara, Baghdad, Bahrain, Barranquilla, Basrah, Beirut, Cayenne, Damascus, Georgetown, Guatemala, Havana, Jeddah, Kuwait, Merida, New York, Panama, Paramaribo, San Andres, San Jose/Coco, San Juan, Tegucigalpa, Tehran
8942 Bangkok, Hong Kong, Kuala Lumpur, Manila
8959 Caracas/Maiquetia, Ndjamena
10009 Kabul, Karachi, Lahore
10018 Abadan, Bombay, Delhi, Kathmandu, Kuwait, Tehran
10024 Antofagasta, Asuncion, Buenos Aires, Cordoba, Lima, Mendoza, Puerto Montt, Punta Arenas, Resistencia, Salta, Santiago
10025 Beira
10048 Anchorage, Cold Bay, Tokyo
10066 Calcutta, Cocos, Colombo, Delhi, Dhaka, Jakarta, Kuala Lumpur, Madras, Male, Singapore
10081 Tamanrasset
10084 Beirut, Malta
10096 Asuncion, Belem, Brasilia, Buenos Aires, Campo Grande, Caracas/Maiquetia, Leticia, Manaus, Montevideo, Paramaribo, Piarco, Porto Alegre, Porto Velho, Recife, Rio de Janeiro, Salvador
11195 Belem, Brasilia, Campo Grande, Porto Alegre, Porto Velho, Recife, Rio de Janeiro, Salvador
11279 Bodo, Reykjavik, Sondrestrom
11282 Honolulu, San Francisco
11291 Canaries, Dakar, Paramaribo, Sal
11300 Addis Ababa, Aden, Asmara, Benghazi, Bujum Bura, Cairo, Dar es Salaam, Djibouti, Hargeisa, Jeddah, Khartoum, Mogadiscio, Nairobi, Riyan, Tripoli
11327 Georgetown
11360 Asuncion, Cordoba, Mendoza
11384 Guam, Honolulu, Naha
11387 San Andres
11396 Bali, Barranquilla, Darwin, Guatemala, Havana, Jakarta, Kota Kinabalu, Kuala Lumpur, Manila, Merida, New York, Panama, Perth, Piarco, San Jose/Coco, San Juan, Singapore, Tegucigalpa, Ujung Pandang
13261 Honolulu, San Francisco
13273 Honolulu, Niamey, Tripoli
13288 Addis Ababa, Aden, Bahrain, Bombay, Bujum Bura, Cairo, Delhi, Khartoum, Kigali, Kuwait, Mogadiscio, Rangoon, Riyan, Tehran
13291 Bodo, Cambridge Bay, Frobisher, Gander, New York, Reykjavik, Santa Maria, Shanwick
13294 Anchorage, Brazzaville, Bujum Bura, Cold Bay, Johannesburg, Kinshasa, Luanda, Niamey, Tokyo
13296 Seoul
13297 Caracas/Maiquetia, Guatemala, Havana, Merida, Piarco, San Jose/Coco, San Juan, Tegucigalpa
13300 Aukland, Guam, Hong Kong, Honolulu, Manila, Naha, Nandi, Pascua/Easter Island, Port Moresby, Sydney, Tahiti, Taipei, Tokyo
13304 Accra, Algiers, Kano
13304½ Sao Tome/Salazar
13306 Antananarivo, Bombay, Bujum Bura, Canaries, Cocos, Dar es Salaam, Gander, Johannesburg, Lisbon, Lusaka, Mahe, Mauritius, Nairobi, New York, Perth, Reykjavik, San Juan, Santa Maria, Seychelles, Shanwick
13309 Bangkok, Hong Kong, Manila
13312 Amman, Ankara, Bahrain, Basrah, Beirut, Damascus, Jeddah, Kuwait, Tehran
13315 Canaries, Dakar
13318 Calcutta, Cocos, Colombo, Darwin, Dhaka, Jakarta, Kuala Lumpur, Madras, Male, Perth, Singapore
13336 Beira, Kabul, Karachi, Khartoum
13344 Monrovia
13354 Honolulu, San Francisco
13357 Abidjan, Casablanca, Dakar, Recife, Rio de Janeiro, Sal, Salvador
17904 Anchorage, Aukland, Cold Bay, Guam, Honolulu, Manila, Nandi, San Francisco, Sydney, Tahiti, Tokyo
17907 Asuncion, Buenos Aires, Cordoba, Darwin, Jakarta, Mendoza, Montevideo, Perth
17946 Canaries, New York, Reykjavik, Shanwick
17949 Johannesburg
17955 Canaries, Dakar, Sal
17961 Addis Ababa, Brazzaville, Cocos, Perth

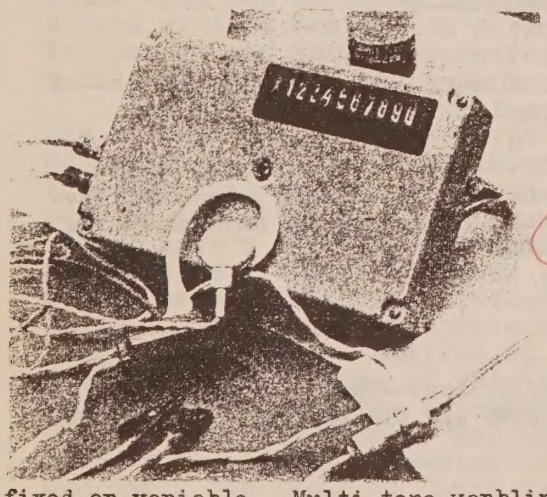
Equipment

The Realistic DX-400, reviewed by Geoff Halligey: "This new receiver is similar in appearance, frequency coverage and method of operation to the Sony ICF-2001, but it operates directly from the electric main, 12-volt DC or internal batteries. FM coverage is 87.4 - 108 MHz, tuned either by up/down push-buttons or auto-scan (both in 50 or 100 kHz steps) and with 6 frequency presets. Frequency readout is by liquid-crystal display to the nearest whole kHz in the AM/SSB/CW modes, or to the nearest 50 kHz for FM. (The main reason I got this receiver was to get a digital readout on the FM band, so that I could identify the various European FM stations which break through when we get a good 'high' settled across the North Sea.)

"AM/SSB/CW modes cover 150 - 30,000 kHz without gaps. Tuning is also by up/down push-buttons (in 1, 5 or 10 kHz steps), plus a ±2½ kHz fine tuner. SSB tuning is far easier and smoother than with many other receivers. There is auto-scan over any chosen section of the entire band, and, as on the FM range, there are 6 pre-selectable (stored in memory) frequencies. RF attenuation is provided by a 3-step switch, while an antenna trimmer and a signal/battery-strength meter are also included. Filters give a 2½ kHz bandwidth on "narrow", 3 kHz on "wide" (AM/SSB). PLL circuitry ensures rock-steady reception on all frequencies. Sensitivity is quoted as 0.5 microvolt for 10 dB signal-to-noise ratio over the entire MF and HF spectrum on SSB, 1 microvolt on AM. Audio volume and tone controls complete this useful receiver, which measures 12 x 6 x 3 inches and weighs only 4 3/4 lb complete with batteries. Two AA cells power the memory.

"Audio tone is surprisingly pleasant. Push-buttons and auto-scan, however, are not the same thing as a tuning knob. This is essentially a receiver for the traveller, or as a second receiver in the shack, where exact frequency (as for RTTY reception) isn't needed. But it is very useful to be able to key up a known frequency, spot-on, and to be able to monitor it while searching the band on another receiver. I can, for instance, have the DX-400 sit on 11185 (where the Thatchers were heard en-route home from North America), while my R-2000 is searching for 'numbers' stations. For reception of very weak, interfered-with signals, it is not as 'good' as the R-2000 - just as the R-2000 is not as 'good' as the Drake R7 - but the DX-400 is excellent for the purposes outlined. Cost in England is about £200 ($300)."

The Realistic VSC-1000 variable-speed cassette recorder was mentioned here last November. I bought one, and after a few months of regular use, I'm disappointed in it. The main problem is that the motor causes static interference to the receiver being recorded. When the signal is strong, the "hash" is negligible, but when the signal is weak (and my Drake's RF gain is turned way up), turning on the recorder can obliterate the speech content. Fast-forward and rewind cause even more severe interference. Another disappointment is that the playback isn't really intelligible (given ordinary SSB channel quality) when played back at more than 1.3 times regular speed - it's too choppy to understand. But it is nice to be able to skim through a tape, slowing down only for passages of interest. Another minor problem is that the motor is weak. A cassette that doesn't rewind smoothly can easily bring the motor to a halt. Radio Shack seems to have engineered the VSC-1000 to do its duty with hardly any margin for "forgiveness". It feels flimsy - though, in fact, I've dropped it accidentally, without causing any apparent damage. A good point is the recorder's automatic gain control, which handles abrupt changes in input level very well. If only it didn't interfere with what's being recorded...



Here's a device you won't see at Radio Shack. It's a "Soviet-made 'tonal decoder'", allegedly used by Canadian professor Hugh Hambleton, who was convicted of espionage in England about a year ago. This photo (which I hope will reproduce well enough to show the digital display and earpiece) is from p. 65 of Intelligence Warfare by Col. William V. Kennedy (Crescent Books, 1983, ISBN 0-517-412640; originally published by Salamander Books Ltd, England). This book doesn't say how the device was used, but I'll bet it converted electronic "melodies" broadcast via shortwave into numbers, which in turn could be converted into words and phrases. The photo isn't clear enough to show if the readout is passive or set by the operator - which would be a clue as to whether the tone/number conversion was fixed or variable. Multi-tone warbling signals quite unlike RTTY, CW, or FAX have been heard here every now and then, most recently (29 Dec) on 11120 USB for about 15 minutes around 1800z, and much more strongly on 18704.4 USB for about 15 minutes around 1830z (USB used only to indicate the tuning that yielded the most distinct tones). In both cases, the warbling just appeared and disappeared, without call-sign or sign-off.

Relating these signals to the device above is pure speculation on my part. Anyone else have any thoughts on this subject? Is R2D2 really just spouting gibberish? (And who is this "Force" anyway???)

.....

December Log

3860 L var. Relay of Space Shuttle/Mission Control comms--AP
4013 R 0210 HXX (Paris) weather bcast, 425/50N--EF
4061.5 R 0610 WBR7Ø (NWS Miami), 5# coded weather bcast//13624.3, 850/100N--DS
4471 U 0027 NNØICW, Navy MARS net--DS
5538 U 2206 Japan Air-461/Falcon (Bahrain LDOC)--IK
5574 U 1336 San Francisco/Empress-31Ø & MAC-7ØØ31--DS
5690 U 0420 Lahr Military VOLMET bcast--DS
5703 U 0419 Lawman/Elmendorf (RTTY set-up)--DS
5767 U 0408 Echo-4-Charlie/Echo-5-Charlie--DS
5925 R 0605 WBR7Ø (NWS Miami) weather bcast // 8130 & 10950, 850/100N--DS
6467 R 2000 US Coast Guard, 170/74N--EF
6682.8 U 0220 Conversations in Russian then Spanish (Cuba? Nicaragua?)--BR
6683 L var. Spar-6Ø p/p via Andrews--RH SAM-31682/Andrews & Scott--DS
6693 U 2331 Trenton Military VOLMET bcast--IK
6707 U 0557 USCG Honolulu, marine weather bcast--DS
6715 L 1625 SAM-86971/Andrews--RH
6723 U 2201 4-Romeo-Kilo/4-Papa-Kilo & 1-Quebec-Tango--DS
6738 U 0150 Navy Bravo-Hotel-35/McClellan--RH
6742 U 0343 Heidison?/Ottawa--DS
6750 U 0240 Teal-23 p/p Mather Monitor via MacDill--DS
6761 U 2137 Shake-87 p/p Springfield Ops via Override--DS
6833 A 0700 10 Dec: "Atn 542-25", 5# in Spanish--RH
6875 U 2029 26 Dec: 3#2# in English--RH
6878 A 0638 27 Dec: 5# in Spanish--RH
7180 U var. Relay of Space Shuttle/Mission Control comms--AP
7527 A 0301 11 Dec: "Atn 536-95", 5# in Spanish--RH
7585 R 0300 6VU73 (Dakar, Senegal) weather bcast, 425/50R--EF
7740 U 1905 31 Dec: "571 571 571 1-Ø", 3#2# in English; 5## German in backgrd--RH
7755.5 R 0200 WFB marker & RYs, 850/50R--EF
8714.9 R 0330 WCC (RCA, Chatham, MA), news, SITOR ARQ--EF
8918 U 2228 Vader-74/New York--DS
8967 L 1911 SAM-31682 p/p Andrews Metro via Andrews--DS
8972 U 0434 Romeo-6-Oscar/Sierra-4-Juliet-Gulf-2 & 1-Alfa-Tango--DS
8984 U var. Commsta Miami/USCGCs Dallas & Hamilton--DS
8989 L 2237 Navy-5Ø496/Andrews--DS
U var. MAC-8Ø223 p/p Elmendorf via McClellan--DS Gull-Ø8 p/p via McClellan--DS
8993 U var. MAC-4Ø615 p/p Charleston Command via MacDill--DS Drum-37/MacDill--DS
9014 U var. Sentry-14 p/p Tinker Metro via Lajes--RH Papa-Lima-1Ø p/p Memphis NAS via Scott--DS MAC-6Ø168 p/p Pope via Scott--DS
9027 U 0300 Coded msg bcast by Red River--DS
10112 U 1856 Tedium p/p via McClellan; Tedium/Big Deal--RH
10195 U 2109 CHPW/CHPT2--DS
10902 R 0055 FCC (Peach Springs), 425/45N bit inversion--EF
11118 L 1715 SAM-31683/Andrews--RH
11176 L 2213 Navy-5Ø496/Andrews--DS
U many Hank-52 & Vader-78 p/p's Serious via Albrook--DS Navy-557/Albrook--DS
11179 U 2105 MAC-4Ø65Ø p/p McGuire Metro via Loring--DS
11180 U 2005 SAM-31682 r/c Andrews--DS
11182 U many SAM-1249Ø p/p Ellsworth via Scott--DS Watch-72 p/p Raymond-24 via Scott--DS Swing-51 p/p McGuire via Scott (Bob Hope's Xmas USO show en-route to Lebanon)--RH Century-86 & Mamie-6Ø p/p Raymond-24 via Scott--DS Cody-Ø1 p/p via Scott--RH
11204 U 2027 Ascot-4966/Belize--DS
11226 U 0106 Kitty Boy & RATT/Lajes--IK
11233 U 1854 Canadian Military-518/Trenton--RH
11239 U 2148 MAC-6Ø147/McClellan--DS
11246 U many Eagle-41, Swing-63, Teal-48 & MAC-9ØØ19/Scott--DS
11249 U var. Air Force-1/Andrews--AP & DS SAM-5Ø496 p/p CINCLANT via Andrews--DS
11250 U 1922 Fleetwood r/c MacDill--RH
11388 U 2134 22 Dec: 5# in Spanish--RH
11460 U 1629 SAM-86971 r/c Andrews--RH
11565 U 1805 29 Dec: 5L (IPA)--RH
12224 R 0010 Voice of America RY test marker tape--DS
13215 L var. SAM-86792 r/c Andrews--DS Spar-6Ø p/p via Andrews--RH
13244 U 1835 Ascot-2716/Ascension--RH Navy Lima-Victor-66 p/p via MacDill--DS

Contributors:
EF = Ed Flynn (Maryland)
RH = editor (Rhode Island)
IK = Ian (England)
AP = Amy Polivka (Nebraska)
BR = Bob Rankin (Kansas)
DS = Daryll Symington (Ohio)

Below 30 MHz continued

13247 U 1622 SAM-31681 p/p SAM Command via Andrews--RH
13285 U 1923 Pacific Western-9Ø8/??--RH
13937 U 1936 Roller Derby r/c Skytrain, Grand Junction & Rainbow--BR
14295 U var. Relay of Space Shuttle/Mission Control comms--AP
16450 U 1850 WHD-576 (Medical Advisory Systems)/Pass Merchant (vessel)--BR
17975 U 1831 Sky King bcast by Siphon--RH
19885 R 1625 Y7A73 - Y7A79 - Y7KJ1 (German Embassy), 67 wpm--DS
20079 R 1604 FUN - FIP - FWA -FOT (Diplo, Paris) news in French, 67 wpm--DS
20870 U 1525 NR-1Ø2 p/p Izmar, Turkey via Berne Radio--DS
20875.5 L 1832 Cerro Tololo Observatory (Chile)/Kitts Peak Observatory (Tucson, AZ)--RH
21988 U 1453 Lima-Echo p/p Switzerland via Berne Radio--DS
23287 U 1435 Papa-1-Romeo/Baker-1-Alfa--DS

CANADA

Send Canadian frequency information, radio system details and other information relating to Canadian monitor radio listening and questions to:

Rob Berezowski, 211 Costigan Bay, Saskatoon, Saskatchewan, S7J 3P4 Canada

Greetings all and welcome to the March Canada column. This column comes direct from Saskatoon, home of the icicles. Today it was very warm, only -20C. For the past few weeks it has been very frigid. Temperatures have been hovering around -30C, with the low last night being -40C. At these temperatures every little fault of your car makes itself obvious. They were strongly recommending survival gear for all rural road trips. They all say this is not normal for this time of year, but they don't say that it is really unusual. All and all things are looking pretty good here.

Last week the 3rd year electricals had a barbecue to celebrate the end of exams. Now most people thought we were nuts, but you just can't beat the taste of barbecued steak. The mosquitoes didn't give us any trouble at all, but most of the people preferred to listen to the stereo inside. The neighbors sure gave us some wierd looks though.

To start off this month I would like to draw attention to some articles that have been passed on to me. Being so cold outside I am sure you would like some reading material. There is a variety of articles on a wide range of topics. On the subject of cellular mobile phone systems I have two articles sent by Doug (CAN-041). Both appeared in the Globe and Mail on Sept. 30, 1983. The first article deals with the scramble to obtain licences for cellular systems. The second article deals with Novatel, a joint venture of Alberta Govt Telephones and Nova Corporation. Novatel manufactures cellular mobile phones, and has been involved in the AGT Aurora project.

The next item is also from Doug (CAN-041) and is an article on the reorganization of the Dept of Communications. The article describes a little bit of the functions of each division of the DOC. I believe the article appeared in the Globe and Mail, but am not sure of the date that it appeared.

I have a few articles relating to air and sea rescue. Two articles were sent in by Doug (CAN-041). The first deals with a report made on the effectiveness of Canada's rescue coordination centres. The study indicates that the centres handle mostly marine emergencies but are staffed by air operations personnel. The study contends that because of this the centres cannot perform their duties properly. The article appeared in the Niagara Falls paper on Dec21/82. The St. Catherines paper had an article on Dec 23 relating to a pilot project to give the Canadian Coast Guard law enforcement powers. Currently the Canadian Coast Guard has almost no authority to enforce regulations unlike the US Coast Guard. This article was forwarded by Doug (CAN-041). Chris (CAN-061) sent in an article regarding the SARSAT system. This is a system of satellites that detect the ELT signal from a downed aircraft and relays the exact position to the appropriate Rescue Coordination Centre. This article appeared

in the 2nd issue of Volume 19 of Sentinel, a magazine published by the Canadian Armed Forces.

Chris also sent in an article on the Ontario Ministry of Natural Resources and the forest fire fighting functions of the MNR. The article is a very good article with lots of interesting information on forest fire fighting and the MNR in general. I do not know the name of the publication that this article came from, and I hope I do not infringe any copyrights. If anyone is interested in seeing this article, I can supply a copy if you will please refer to the note below.

Chris also sent along an article that gives some interesting facts about Canada's Wonderland, a theme park located at Vaughn, Ont. The park has a staff of 1400 and a large communications system. Chris also sent in an article on the organization of the Canadian Forces Communication Command (CFCC). Although no specific information such as frequencies are given, general information is supplied.

In previous issues I have mentioned MSAT, a program to develop mobile satellite communications. This would allow reliable, direct two way communication between two persons over a large distance. An example would be travellers in the northern part of Canada. Bob Horvitz has sent to me a copy of a press release from the Dept of Communications. The DOC and NASA have reached an agreement to begin a program to develop a joint MSAT system. The system envisaged by DOC and NASA will be a commercial system, with initial experiments and service trials to be done using Telesat. The launch of the first satellite is planned for 1988. Anyone wanting more details can obtain a copy of the press release from me (please see note below).

I also have some information on another wave of the future. From Jerome (CAN-035) and Harry (CAN-074) come two articles on the Metro Toronto Police Dept. implementation of mobile data terminals. These terminals allow for computer dispatch of calls as well as almost instant access to CPIC/NCIC for inquiries. One article appeared in the Toronto Star on Oct 31/83, while the other article appeared in the Globe and Mail on Oct 13/83.

To finish things off I have two more articles from Doug (CAN-041). The first article deals with the attempts to set up a central 911 emergency line in Welland, Ont. The other article gives some information on a new sniffer being used by the RCMP. This new unit uses a gas chromatograph to detect explosives, and tests are being done to use the same procedure to detect drugs.

Is everyone out there still awake? If you have gotten this far, you are doing well. As I have done in the past I will supply copies of any of the above articles if any members are interested in reading them. All you have to do is send me a SASE, and you must be specific as to which article(s) that you would like. You can ask for any number of articles, but please don't ask for them all. I don't get any percentage of the money the xerox machines eat.

Next up is some material from Doug (CAN-041). This material was mislaid, so my apologies to Doug. The information is for the Welland, Ont. region.

Ontario Provincial Police		Welland		42.060
		St. Catherines		41.980
				42.060
				42.060/42.020
		Niagara Falls		42.060
				42.060/42.020
				41.980
Welland Fire Dept.		Operations	1	153.800
		Provincial	2	154.070
Welland	Atlas Steel Co.			149.020
				151.115
				154.570
				165.720
				464.4875/464.4875
				469.9625/469.9625
	Page Hersey Tubes (division of Stelco)			
				149.290
				151.055
				152.990

Canada continued

	Union Carbide Ltd.		30.020
			464.950/464.950
	Welland Removal Service(garbage)		460.2625/465.2625
	Welland Separate School Board		159.645/159.150
	Rods Delivery		469.4625/469.4625
	Alexander Limousine Service		461.9375/466.9375
Niagara Regional Police	Welland		142.230/138.210
			142.770/138.750
	St. Catherines		141.585
			142.230/138.210
			142.410/138.390
			142.545/138.525
			142.575/138.555
			142.770/138.750
			143.055/139.035
	Fort Erie		142.575/138.555
	Grimsby		142.575/138.555
	Niagara Falls		142.545/138.525
			143.055/139.035
Ontario Ministry of Health			149.170
			150.100
			149.440
Welland	CHOW Radio News		172.680
	4500 Taxi		460.0625/465.0625
	Consumers Gas Co.		451.8125/456.8125
			452.9250/457.9375
	Welland SPCA		162.210
	Welland Hydro Electric		167.010
	Welland Engineering Dept		167.295/162.975
	Tallman Transport		153.530
Niagara Region	Public Works Dept		148.630/149.495
Ontario Dept of Transport			150.185/149.560
Pelham Fire Dept (dispatched by Welland)		1	153.800
		2	154.070
Welland	Niagara Region Water & Pollution Control		
			151.205/156.015
	Niagara Region Social Services		151.165/156.060
	John Deere (farm) Machinery		166.140
	Niagara Region Public Works		169.185
	Welland Airport		122.800
			123.000
	Ensign Security Services		170.190
	Niagara Regional Emerg. Measures		148.630/149.495
			149.525
	Nieuwesteeg Nurseries		460.2625/465.2625
	Armstrong Communications (cable TV)		460.6750/465.6875
	Niagara Region Roads Dept		162.200
	Claire's Delivery		453.875/458.8875
	Duffin Contracting		452.375/457.3875
	Niagara Coach Lines		171.480
	Arc Communications		153.620
	Requip Ltd (Equipment Rentals)		167.820
	IBM of Canada (servicemen pager)		469.3375
	Maclean-Hunter Communications		414.0375
	Purolator Courier		453.2875/458.2875
	Bell Telephone Co.	Servicemen	165.495
		Pager	149.770
		Mobile Phone	152.780/158.040
	Shaw Pipe Protection		159.765
	Central Communications		150.410
	Stolk Construction		460.2625/465.2625
	Cyanamid (Canada) Inc.		454.200/454.200
	Opal Construction		168.510/164.490
Niagara Falls	Transit Dept		462.475/467.4875
	Hydro Power		167.070
	Water Works		169.560
	Public Works		169.440
	Fire Dept		153.800
		Provincial	154.070
	Ontario Hydro		49.620
			49.660

Canada continued

	Nabisco Foods		149.290
	SPCA		168.870
Fort Erie	Fire Dept		153.800
		Provincial	154.070
	Public Works		169.500
Port Colborne	Public Works		169.080
	Hydro Power		169.590
	Fire Dept		153.800
		Provincial	154.070
	Bell Marine & Mill Supply		165.060
	Inco Ltd		467.950/467.950
			469.050/469.050
	Murdoch's Tire		160.800
Ham Repeaters	Fonthill	VE3 WCR	147.300/147.900
	Grimsby	VE3 TVI	146.205/146.805
			443.250/448.250
	St. Catherines	VE3 NRS	147.240/147.840
	Welland	VE3 UHF	444.500/449.500

Doug also passed along a set of ten codes for the Niagara Region Police. The codes are mostly the standard APCO codes with the following exceptions and additions.

10-6 Enroute to __
10-22 Contact __
10-60 Subject Negative
10-90 Robbery
10-92 Person in Custody

Thanks Doug for all that material. Next we have some material on the Quebec Provincial Police, also known as the Sureté du Québec. The information was sent in by Gilles (CAN-101). The QPP uses a system of repeaters to cover the province. The ten channels used are listed below (repeater outputs).

Ch 1 166.800
2 166.740
3 166.500
4 167.340
5 167.040
6 166.680
7 166.620
8 166.830
9 167.010
10 166.650

Car to Car: 171.180 , 171.075?, 172.020

The QPP system of repeaters allows for cross patch between repeaters. A car on one repeater can request through his HQ to talk to another car on another repeater. Another feature of the system is that it allows patrol officers to answer the phone in the office. After business hours, the telephone call is automatically transfered to the regional HQ. The phone call is then patched into the repeater system so that the patrol car can speak directly to the caller. A tone to mask the voice of the caller is also used for scrambling purposes.

The QPP own a Bell Ranger helicopter that is based in Montreal. The helicopter is used not only for law enforcement patrols, but for searches, blood for the Red Cross, and other missions of mercy. The QPP also own two patrol boats used on the St. Lawrence in the summer.

The QPP and other city police forces can also be heard on 148.780 in the Sherbrooke area and 148.810 in the Quebec City area. These two frequencies are used for Civil Defence, but co-ordination between the police forces can also be heard.

Gilles also sent in the following frequency information.

Verdun Taxi	171.030
Alarme Experts Sherbrooke	171.075(?)
Quebec Ministry of Tourism, Fish & Game	171.840
	171.960

(These frequencies are used by Sherbrooke, Victoriaville, Lac-Mégantic, Granby and Thetford Mines)

Also used by the Ministry of Tourism, Fish & Game are the following frequencies: 171.240

Canada continued

		171.330
		171.390
		171.720
		171.900
Quebec Seaway Channel (St. Lawrence)		171.270

Thanks Gilles for that interesting information. Colin (CAN-096) sent in a bundle of material for the B.C. Interior that he gathered while on a trip through the area. I'll start some of the material this month and continue next month. First of all Colin mentions that the Boundary Bay Airport is in use for light aircraft only. Tower is on 118.1 with Ground on 124.3 and ATIS on 125.5.

Merritt	RCMP	Local/Tac 1	139.080
		Tac 2(?)	139.245
	Fire Dept		153.950
	Public Works		158.730
	B.C. Highways Dept		152.210
			143.895
	Quilchena Ranch		162.660

I'll have more from Colin's list next month. I also have one more item for you. If anyone is interested in radio amateur VHF/UHF repeaters, the Canadian Radio Relay League Inc. (CRRL) publishes a complete list of repeaters across Canada. The address to write to is P.O. Box 7009 Station E, London, Ontario N5Y 4J9.

With that I will close and wish all of you the best until next month.

COMMUNICATIONS PROFILE

Cliff Polkinghorn, 14310 Acacia St., San Leandro, CA 94579

This column is for special projects that explain various radio systems in detail. Frequencies and radio codes of not only municipal agencies and certain federal government agencies may be listed, but also large businesses and corporations. The contribution must be lengthy enough that publishing it in one of the regular columns would not be possible. If you are inclined to submit a report as the one below appears, please follow No. 8 in the inside front cover of the Newsletter.

WELL---Here we go with your March column. This month we will look at "PIERCE COUNTY, WASHINGTON." OUR THANKS GO OUT TO MATT MERCER WA-012 FOR THIS FINE ARTICLE.

I would also like to thank Jim Cavanagh for sending me some info on a new radio system called ACBS. Unfortunately, that kind of info belongs to "TECHNICAL TOPICS." I forwarded it on to "STEPHEN" and I am quite confident it will see print soon.

NOW----ON TO "PIERCE COUNTY, WASHINGTON"----

LAW ENFORCEMENT SUPPORT AGENCY (LESA)
PIERCE COUNTY, WASHINGTON

Matt Mercer (Wa 012)

County Seat: Tacoma

Communications for both the Pierce County Sheriff's Office (PCSO) and Tacoma Police Department (TPD) are handled by LESA (Law Enforcement Support Agency) at the County Building, Tacoma.

LESA is located in a locked, unmarked, set of rooms in the basement of the County Building. Admittance can only be attained by pressing a buzzer, and speaking into the door intercom system, which identifies yourself to the person who decides whether to let you in.

Once inside, your eyes quickly scan a sparse, but elegant setting, composed of offices and a modest reception area. The walls have been done in stylish paneling, and the carpets are very thick - to deaden any and all sounds. Standing straight ahead is the office of THE BOSS - the man who oversees LESA.

To the left, as you walk in, you notice a sliding glass door. Beyond

that is the "Com Center", as it is affectionately known. This is the heart of LESA.

Upon entering this room, your first encounter is with several consoles of keyboard terminals. Behind them are several individuals wearing headphones. These people are the Communication Officers, or "Call Receivers". The moment you pick up your phone to report a crime, to call for help in a emergency, or to make a request, these individuals punch in the information you give, asking "tons of questions", as they furiously type away. Because they are the first contact with life or death, or the resource to a question or request, these Communication Officers must be calm and patient. They must deal with people who are the chronic complainers, the person attempting sucide, or the "414" (crazy people).

Further into the room, as you step away from the keyboard terminals, are more keyboards, which belong to the dispatchers. The dispatchers for Tacoma Police are on one side, and the dispatchers for the County Sheriff are on the other, with the supervisor's console in the middle.

Once your call is received by the Communication Officer, the computer automatically routes the information to the City or County Dispatcher. The dispatcher puts a priority number on each call, dispatching according to importance and availability.

On each dispatch console are buttons controlling the traffic signals. Tacoma Fire Department and Pierce County Fire have the same set of traffic control buttons. Each dispatcher also can talk directly to Washington State Patrol, or a fire district, at another touch of a button.

If a officer needs information about a driver's license, a suspect vehicle, or needs a tow truck, he or she switches to a separate channel, known as "Records". This function is a separate entity, in another part of the County Building.

The following is a breakdown of the Pierce County Sheriff's office:

(F-1) 155.640 (R) Patrol-Dispatch
(F-2) 156.090 (S) Records/County Common (small towns)
(F-3) 154.950 (S) Administration
(F-4) 155.370 (S) LERN (Formerly, County to City)

Included in the county, are small towns with their own police, or dependent on sheriff's deputies. They are as follows:

Buckley 155.010 and/or 156.090
Puyallup 155.130 (Western Washington Fair Security - 151.925)
Eatonville 156.090 County Common
Gig Harbor 156.090 County Common

For the City of Tacoma P.D., the breakdown looks like this:

(F-1) 460.150 (R) Patrol-Dispatch
(F-2) 460.050 (R) Auxillary Dispatch and "small talk"
(F-3) 460.350 (R) Records and Information
(F-4) 460.300 (R) Auxillary Dispatch - more "small talk"

Up until late 1980 (or therabout), Patrol-Dispatch was on channel two (460.050). Then a massive windstorm blew down the antenna used for primary dispatch. 460.150 became primary. On occasion, 460.150 will develop problems, and 450.050 becomes primary dispatch.

460.050 (F-2) is often set aside for detailed assignments, such as handling a major crime that just occured, or handling a event at the "Tacoma Dome", for example. At such times, the channel becomes "closed" to regular traffic.

460.300 can also be interesting to monitor by itself. From time to time, one may hear student voices mentioning: "Jones Hall needs to be locked" or, "Can I meet you somewhere?" If you hear the unit or units identify themself or selves as William 84-92, you're listening to Safety and Security, University of Puget Sound. If a student officer needs assistance (i.e. a crime is in progress), he or she just needs to say, for example: "William 86, Tacoma", and a dispatcher responds. More than once, a student security officer accidently hits the wrong button and ends up talking on Channel one, which infuriates the dispatcher.

460.300 also has a "mute" function. Often a patrol officer doesn't want his remarks about a case broadcast. He will ask for the repeater to be muted. In this function, only the dispatcher is heard.

Communications Profile continued

Tacoma Police Department Breakdowns

HENRY	Early Morning
FRANK	Day
LINCOLN	Evening
JOHN	Late Evening
PAUL	Early Evening
TOM	Motorcyle/Traffic
GEORGE	Narcotics/Vice
YOUNG	Juvenile
ADAM	Administration
IDA	"Ident" Mobile crime identification labs
WILLIAM	Security
ROBERT	Retail/private business Security Patrol's
VICTOR	Support
MARY	Traffic

TPD Assignment Breakdown(always subject to change)

William 11 Chaplain's Office Formerly Adam 14)
William 65 Metropolitan Park Police - "Central" Wright's Park
William 68 Metropolitan Park Police
William 69 Metropolitan Park Police - "North End" Point Defiance Park
William 67 Metropolitan Park Police - "South End" Wapato Park
William 55 South End School Patrol
William 56 North End School Patrol
William 58 Bates Vocational School Security
William 84-92 Safety and Security, University of Puget Sound
William 42 Tacoma Mall Security
William 47 Tacoma Mall Security

Frank, Lincoln, John, Paul, Henry, 11 Wagon
Paul 40 Cannine
Ruston 7 Town of Ruston (approx. 24 blocks wide, with own police dept., located in Tacoma's North End, by Point Defiance Park)

Lincoln 73 Patrol Sergeant
Lincoln 52 Field Sergeant
David 64 Vice Squad Officer

Lincoln 85 Field Sergeant
Frank 7 71 Patrol Sergeant
David 6 65 Crimes Against Property
David 16 Crimes Against Persons

This preceding list is not complete. It has been revised, updated, and I hope it is accurate. Over the four years or so I've monitored TPD and PCSO, I can apply "Murphy's Law", which in this case says, "By the time this article sees print (if it does), all the information will be obsolete.

In 1986, Pacific Northwest Bell should have totally implemented a 911 Emergency Phone System, which will connect all police and fire, and ambulance companies, in Pierce County together. How LESA will change is not immediately known. Fire Dispatch is now totally two separate units for both county and city. By dialing three digits, when the system is complete, one will be able to get any kind of aid that's needed.

---

contact/info wanted

This column has two purposes: to help members contact each other, and to help members obtain information directly from one another on various subjects related to 2-way communications monitoring. If you desire to converse, meet, or correspond with other members by telephone, letter, or cassette tape in a certain geographic area or with members who have similar listening interests, this is the perfect place for you to make known your interests. Remember – those who respond will do so directly, so be sure to provide your phone number, the best time to be called, or your address. Write to: Amy Polivka, 12906 Ohio Circle, Omaha, NE 68164

TAPE SWAPS: This member wishes to exchange tapes of police, fire, paramedic, etc. communication especially from Los Angeles and New York. (12-1-83)
LARS NILSSON (SWED-003), Mosstigen 41, S-87100 Harnosand, Sweden

Contact/Info Wanted continued

CIRCUS INFO WANTED: Ringling Bros. and Barnum Bailey Circus train for the Blue Train. (12-1-83)
EDWARD H. DUFOUR, III (CT-005), 21 Sioux Rd., East Hartford, CT 06118

WANTED: Frequency information for Kent County, Michigan; Grand Rapids, and Kentwood Police, Fire, and E.M.S. (12-6-83)
JAMES RICHARDSON (CT-051), 4658 Lamplight Lane S.E., Apt. H-18, Kentwood, MI 49506

CALLSIGN NEEDED: This member has found the frequency for Harbor Place Security, Baltimore, MD. It is 469.912, but no callsign. Can any Baltimore member let him know? (12-7-83)
JOE M. LEWIS (MD-015), 750 Scotland St., Dunedin, FL 33528
813-733-9494 - 9 a.m.-5 p.m. EST No collect calls

WANTED: Any national and Minnesota listings from the National Directory of Survival Radio Frequencies. Will pay postage or photo-copying costs. Also would like to hear from anyone that has a copy of The "Top Secret" Registry of U.S. Government Radio Frequencies - 5th Edition. Would like to correspond with anyone interested in federal or Minnesota frequencies. Has a lot of information to share. (12-20-83)
JAMES A. SCHNOOR (MN-003), 1015 E. Co. Rd. D #303, St. Paul, MN 55110
or (612) 483-6800 anyday before 2:30 p.m. or after 11:00 p.m.

INFO WANTED: This member would like frequencies used by the Idaho Air National Guard and the Idaho Army National Guard. Any other active military frequencies used in Idaho would be appreciated. (12-27-83)
MARK W. JOHNSON (ID-012), Box 251, Fairfield, ID 83327

NEEDED: Computer program for filing scanner frequencies on a TRS-80 color computer.

ALSO: This same member asks again anyone from Nebraska and Iowa who would be interested in starting an RCMA chapter to contact him. (12-27-83)
GUY A. KROGER (IA-002), 3007 9th Ave., Council Bluffs, IA 51501

N E W S L E T T E R D E L I V E R Y P R O B L E M S ? ? ?

If you DIDN'T receive your last issue of the Newsletter; if you DID receive it, but much later than your RCMA friends received theirs...

If you know your subscription is current; if you haven't changed your address; if you HAVE changed your address and let RCMA know well before the end of the month....

FILL OUT FORM #3721 AT YOUR POST OFFICE

Doing so requires your P.O. to trace your missing Newsletter from point of mailing and requires signatures from all handlers involved. The result may well be that you will no longer have Newsletter delivery problems.

Point of origin really begins with the computerized printing of Newsletter mailing labels--and the computer is not going to drop your name or change your address unless told to do so. Labels are then delivered to a professional mailing house, which prepares the current issues for mailing at the Anaheim, CA Post Office.

As you know, your issue does not arrive in an envelope (unless you are an overseas or Canadian subscriber), it is not stapled closed, and it is mailed at bulk rate. All of these facts contribute to the possibility of your Newsletter being delayed or borrowed along the way.

So before you get too frustrated over non-delivery of your newsletter, try filling out a "3721" at your local Post Office.

FCC TOPICS

George DuBois, Editor

FCC news and information of interest relating to two-way communications. Send comments and questions to:
George DuBois, 10048 NE Campaign, Portland, OR 97220

The FCC has amended its Rules to allow the use of certain frequencies in the Highway Maintenance Radio Service for self-powered vehicle detectors. These devices are placed in a small hole in a traffic lane and magnetically detect a passing vehicle. Two 30 millisecond pulses are generated and are received by a nearby receiver to control signals, monitor traffic flow, etc. Use would be allowed on a secondary, non-interference basis on frequencies between 47.02 and 47.40 mHz. Maximum power allowed is 100 milliwatts. No separate license will be required for their use.

Part 90 was amended to allow Fixed stations in the 450-470 mHz band to use omni-directional antennas if they must communicate with at least three other stations over an azimuth of at least 160°. Such point-to-point stations are used for control, telemetry and voice use outside urban areas. The existing rules had required the use of directional antennas, such as those required for land mobile repeater base stations (control stations). Until now, users had to use different systems, with additional frequency pairs, to reach multiple sites.

The Commission has issued a Final Order amending the Second Report and Order in the matter of private paging systems at 928-929 mHz. (March, 83 column.) In the Second Order the Commission set aside 10 of the 40 channels for Private Carrier Paging Systems (PCPS's), companies who would construct and operate paging systems for a profit to eligible users (users who would be eligible in one of the Private services). These would be similar to SMR's at 851 mHz. The Second Order prohibited the interconnection of private paging systems with the public telephone network. Now such interconnection will be permitted, for both private and PCPS systems. In clarifying the Second Order the Commission stated that the amendment of the Communications Act in 1982 states that shared systems interconnected with the telephone network are not common carriers as long as the users make their own interconnection arrangements. In other words, the system owners are allowed the sale of communications service, but not the resale of telephone service.

The FCC has adopted a Memorandum Opinion and Order amending the Second Report and Order in 1982 in the matter of the release of the remaining 250 channels in the 851 mHz band. (This is confusing, huh?) This is in response to a number of petitions for Reconsideration and to clarify a few points. (See Dec., 82 column.) Amendments were made that allow paging on a secondary basis on any shared repeater, not just SMR systems or licensees with their own channel, and licensees in the Business Radio Service may now apply for an extension of the time required to place a large or complex system on the air(otherwise eight months), a privilege before only allowed for Public Safety and certain Industrial applicants. Remote transmitters were given primary status in wide-area systems (such as may be used by Public Safety or utility licensees) even though this may extend their range beyond the normal 20-mile-radius service area and preclude use in other areas. The loading standards (number of transmitters) for trunked systems were changed slightly and control stations may now be counted. They declined to adopt "air time" as the standard for channel loading and will not change the loading standards for conventional systems (70 units). They will also continue to permit manufacturers of radio equipment to be licensed as SMRs. It was alledged by some that certain large manufacturers could sell use of their trunked systems at or below cost in order to sell radios. The Commission says it has no evidence of economic harm to existing SMR dealers and are convinced that the competition will improve service to the public and also make trunked systems available in more areas.

Part 87 was amended to provide for the removal of voice transmissions from aeronautical Non-Directional Beacons (NDBs) in the 190 to 535 kHz abnd. NDBs, a navigational aid, are relatively inexpensive

and are popular at smaller landing areas. A few NDBs are presently used to transmit recorded weather information. Since the use of voice emission requires a wider bandwidth, this limits the amount of spectrum available for other stations. There is expected to be a continued demand for such spectrum for additional NDBs. No new NDBs will be allowed to transmit voice unless absolutely needed. Existing voice stations will be permitted continued operation until 1990 or a replacement system for disseminating weather information becomes available.

The FCC has withdrawn a proposal that would have allowed repeater operation in the 29.0 to 29.5 mHz segment of the 10-meter Amateur Radio Service band. Presently, repeaters are only allowed between 29.5 and 29.7 mHz. Commenters stated that expansion of the repeater subband would have an adverse impact on amateur satellitte operations in the 29.3-29.5 mHz band.

Part 5 was amended to eliminate some of the regulations affecting Experimental Authorizations. (See Feb., 1982 column.) The routine reporting requirments were eliminated, some technical standards lessen-ed, and the operator license requirements removed. The requirement that a Petition for Rulemaking be filed for new services with no present technical standards or for use of new bands was likewise eliminated. A licensee may still file a petition if he desires, either with his Experimental application or at a later date, after test, etc. A new provision for "limited market studies" was added. Transmitting and/or receiving equipment licensed for Developemental use may now be made available to the public. All equipment used in such a study must be owned by the Experimental licensee and may not be sold.

The Commission has amended Part 22 to deregulate customer equipment in the Public (mobile telephone) Radio Services. Just like they did for us with the phone in your home, mobile telephone equipment will now be divided into two classes, new and existing. New equipment, that installed after Jan 1, may no longer be tariffed. A Further Notice is being issued to determine the mechanism for the removal of tariffs on existing equipment. AT&T has requested an expedited decision on this matter, so that ratepayers won't have to absorb the cost of maintaining this existing equipment after the Jan 1 divestiture. The deregulation also applies to Rural Radio Service equipment (which operates on mobile telephone channels), even though some commenters felt that it is a primary service and that the telephone companies should be responsible for the high costs associated with the service. AT&T, though, noted that there were a number of manufacturers of competitively-priced RRS equipment and that a significant number of users are large forestry, mining and ranching concerns.

The FCC has released a proposal to eliminate the separate wireline/RCC frequency allocations in the Public Land Mobile services. As part of a proposal released in 1980 the Commission considered implementing a waiver procedure, whereby a Radio Common Carrier could apply for unused wireline (telephone company) channels and vice versa. Now they are considering a permanant removal of the separate allocations. The separate allocations were implemented in 1949, to ensure competition at a time when the only mobile telphone service was provided by the telephone companies. The independant common carrier business has now developed into a healthy industry, with over twice as many systems licensed as those of telephone companies. This proposal would have the effect, then, of providing RCCs with additional channels, creating more service to the public and providing an incentive for the development of new, innovative techniques, especially in light of future competition from the cellular mobile telephone service.

The Commission has proposed instituting a lottery for the selection of licensees in the Cellular mobile telephone service in those markets below the top 30. When the Commission first instituted the lottery procedure, they declined to implement the process in the Cellular Communications Service since they believed there would be significant differences between competing applicants for the non-wireline (RCC) channels. Now, they find there are at least 16 to 20 applicants in markets 31-90 and even three or more applicants for the wireline (telephone company) channels in some cities. Plus, they are anticipating a greater number of applicants for the markets below the top 90. To reduce the administrative burden and the delay, they are now reconsidering the use of lotteries. By doubling the processing staff size, they figure they can process applications in half the time

and award construction permits a year to two years sooner than the hearing process would take. To discourage frivolous applications (just to be in the "running"), they are proposing financial and technical qualifications on applicants and requiring the provision of service to 75% of a metropolitan area.

FEDERAL GOV'T and ☆ MILITARY ☆

Send all Federal Government and Military frequencies (including those of military aircraft), radio system details, and related questions to:
Dennis Biagioli, 607 W. Pleasant Ave., Villa Park, IL 60181

Sensitive frequencies will not be published. Coast Guard material must go to the VHF Marine editor.

Bbbrrrrrr.....! This may be March, but my fingers are shivvering in seventeen below zero temperatures as they attempt to convince this Apple computer to warm up the room. Perhaps thinking about Spring and the common showers (and thunderstorms) will help.

I would like to recommend to those who have not as yet read the interview with Robert Leary in the "Below 30 mHz" column in the December, '83 RCMA NEWSLETTER, pages 9-11, to do so. He has insightful comments based on his extensive experience. If you are just beginning to monitor Federal frequencies, you may find it particularly interesting.

In Spring a young man's fancy turns to...what else...? Checking out the antenna farm to repair any damage done by the winter wind or your neighbor who thinks your scanners are causing his TVI problem. While you're at it, have you considered protecting yourself from lightning? An amateur radio friend of mine had a rather frightening experience that might frighten you as much as it did a number of us. I am quoting from an article originally appearing in "Background Noise," the newsletter of the Western Area F.M. Amateur Repeater Club, Inc. (WAFAR). The original author is not an RCMA member.

> Some of you have heard about my near electrocution while taking down my tribander (HF antenna). I did not release the lower guy wires on my tower and the antenna got hung up in the tower. While trying to release it, the rear reflector touched the 12 KV supply line which feeds the pole transformer. I thought it was a lightning ground protection line, since it was a single line and not covered with any insulation. A loud report as that of an M-80 and an orange flash amazed us all, and caused the power for the subdivision to be interupted for 45 seconds -- and leaving half my shack and equipment destroyed. The voltage entered the house via the rotor cable since all other cables were disconnected! The Tailtwister box was burned to charcoal. My two-meter base radio was destroyed when the AC cord melted and touched the Micro interface plug, ruining both. Now that the insurance company has taken pictures of the burned wall and shelving and my equipment, I am reworking the layout of the shack. The rotor is going to be isolated from the rest of the equipment and cables!
>
> The Friday before this incident happened, I attended an excellent program on lightning damage and protection. Little did I know I would get a real dose of high voltage soon. Some of the things the speaker told us about were the results of a Motorola sponsored study of damage to commercial installations.

FREQUENCY OF STRIKES:

50 foot towers struck once every 100 years.
100 foot towers struck 4 times every 100 years.

GROUND RODS:
One 5/8 inch by 10 foot copper rod per leg of tower, and all rods tied together with zero gauge wire, using mechanical connections. Avoid soldering cable as it melts and runs out when a strike occurs.

HEIGHT OF ANTENNAS:
Keep antenna below the peak of the tower (or mast). You should be willing to sacrifice any antenna at the top of your tower. They usually get hit!

COAX PROTECTION:
At the base, or where your coax enters the house, connect a plate to your tower. Drill and install lightning suppressors or threaded barrel double female connectors with locknuts (about $15 to $3 each, respectively). Next, loop the coax into a 12-inch circle before it enters the house. The shield is now grounded and lightning will blow out the loop rather than passing it. Also, during lightning situations, disconnect your equipment and ground center to shield, or place the end-connector inside a glass jar. Arcing can cause fires!

AC OUTLET:
Loop your AC cord also, and get surge suppressors for all solid state equipment. Connect conduit (if so equipped) to your ground system.

ROTOR:
Disconnect your rotor cable during storms, it is the most dangerous line into your house! It can cause fire where it enters the house and passes through walls. Believe me, 8 wires of 100,000+ volts are not welcome in any shack!

EQUIPMENT:
Ground your gear. Reception is better as static can be reduced in the equipment. And you don't want to be "off the air" while repairing the damage of a lightning disaster.

BE CAREFUL -- BE WISE -- GET GROUNDED!!

JIM CAVANAGH (IL-060) sent along the following article from "Armed Forces JOURNAL International," Dec. '83.

RITA Tactical Communications System

Thomson—CSF

Battlefield communications systems required by today's armies are a far cry from the back-pack, hand-cranked telephones of World War II. Tactical forces today are highly mobile. Communications techniques not only must keep up; they must contribute to the increase in mobility.

A group led by the French company Thomson-CSF has developed a tactical communications system called RITA. Other firms in the group are LMT Radio Professionelle, Sintra-Alcatel, CIMSA, LTT, SAGEM, and SAT, all of France, and Bell Telephone of Belgium. RITA is expected to be a prime contender in an anticipated procurement of mobile subscriber equipment by the US Army.

With the position of the users on the battlefield unpredictable and always changing, communications equipment must be highly mobile, and command and control links must be fully automatic. Regardless of the user's location, all available communications routes must be capable of being searched instantaneously to provide the fastest available service.

Modern warfare is waged in an environment of increased jamming, interception, and direction finding, making communications security more important than ever. Moreover, there have been dramatic increases in both the volume and the complexity of the information that must be transmitted. To handle the large amounts of voice and data flow, channel dedication must be avoided and all channels must be capable of carrying any type of voice or data information.

RITA meets these requirements for

RITA tactical communications system.

capacity, mobility, security, and operational flexibility. The heart of RITA is called the nodal center. It uses a "switch" that automatically searches out the most practical route for a specific transmission. Coupled with the switch are the radio links, the telephone sets actually used by the subscriber, and high-speed facsimile transmitters and receivers. The equipment is managed by a complex computer software program, and a single nodal center can accommodate up to 300 mobile subscribers and 100 fixed subscribers, allowing up to 140 simultaneous voice and data transmissions in an area of 625 square miles.

Work on RITA began in 1960, with first-generation experiments conducted in 1971 and production runs of standard units in 1979. RITA is in use in the field today by the armies of France and Belgium and is being marketed in other countries. The French have fielded 20 to 30 nodal centers, about 50 ordinary-sized switches and four very large ones, about 400 mobile subscriber terminals (radios), and about 3,000 subscriber sets (telephones).

Several high-ranking US Army and DoD officials have witnessed the use of the equipment by French Army forces deployed in Germany.

The US Army and Marines have shown interest, since RITA is completely developed, has been tested in actual use, is available "off-the-shelf," and can be made compatible with the US' TRI-TAC communications system. Briefings by French military officials are being planned.

According to a French Embassy official, cost figures are not releasable by Thomson-CSF because the product is in competition.

The producers of RITA are seeking a US partner to help manufacture and market the system under a license arrangement. They currently are involved in serious negotiations with at least one possible partner. ■☆■

Following is an unsigned contribution from Olympia, Washington.

A	168.6250		FOREST SERVICE AIR-DISP F-1
A	168.0250		FOREST SERVICE AIR-DISP F-2
A	164.9625		FOREST SERVICE (CAPITAL PEAK)
A	164.8250		FOREST SERVICE (CAPITAL PEAK)
A	164.8000		FOREST SERVICE (CAPITAL PEAK)
A	164.1250		FOREST SERVICE (CAPITAL PEAK)
AF	138.1650		MC CORD AFB (O.S.I.?)
AF	138.1750		MC CORD AFB (O.S.I.?)
AF	149.9250		CIVIL AIR PATROL - FUTURE REMOTE BASE
AF	148.0950		MC CORD AFB (MAINT.)
AF	148.4800		MC CORD AFB
AF	149.1750		MC CORD AFB
AF	149.2050		MC CHORD AFB (MECHANICS)
AF	149.2250		MC CHORD AFB
AF	148.1500	143.9000	CIVIL AIR PATROL
AF	163.5875		MC CHORD AFB (MOTORPOOL)
AF	165.1125		MC CHORD AFB (COMMAND PHONE)
AF	165.1625		MC CHORD AFB (SECURITY?)
AF	163.4875		PORTLAND (SECURITY)
AF	163.5250		PORTLAND (SECURITY F-1)
AF	165.0125		PORTLAND (FLIGHTLINE OPS.)
AF	165.1625		PORTLAND (FLIGHTLINE OPS.)
AF	173.5875		MC CHORD AFB (CRASH CREWS)
AF	407.4250		MC CHORD AFB (M.A.C. OPERATIONS)
AF	413.1250		MC CHORD AFB (M.A.C.)
AF	413.5250		MC CHORD AFB
AF	413.8250		MC CHORD AFB
AR	032.3000		GRAY AAF (OPS.)
AR	032.3000		WASH. N.G. / SEATTLE
AR	040.3000		GRAY AAF (TOWER?)
AR	041.5000		GRAY AAF TOWER
AR	040.5500		M.A.S.T. AT MADIGAN HOSP.
AR	046.7000		PAINE FIELD (OPS.)
AR	149.5750	149.8750	FT. LEWIS (SECURITY TAC-1)
AR	150.4350		FT. LEWIS (SECURITY TAC-3)
AR	150.7250		FT. LEWIS (SECURITY TAC-2)
AR	163.2375		ENGINEERS / RAINIER RADIO SVC. NET
AR	165.0875		FT. LEWIS (NOT CURRENTLY IN USE)

Federal Govt/Military continued

AR	165.5875		FT. LEWIS
AR	163.4125	164.2000	CORPS OF ENGINEERS (CAPITAL PEAK)
AR	163.4125	164.2000	ENGINEERS / WASHINGTON F-1 (WUJ-2)
AR	163.4375	164.1750	ENGINEERS / OREGON F-3 (WUJ-3)
AR	164.5000	165.0375	ENGINEERS / MT. ST. HELENS CREWS
AR	163.3900	??	ENGINEERS / RAINIER REPEATER
AR	172.4000		FT. LEWIS
AR	173.4125		FT. LEWIS (FIRE)
AR	173.4875		FT. LEWIS (FIRE)
AR	407.4750		C.I.D.??
AR	408.1250		M.P.'S (CAPITAL PEAK SITE)
AR	407.3250		MADIGAN HOSPITAL (MED. PAGING)
AR	408.1250		SEATTLE / TACOMA (M.P.'S)
AR	409.1250	407.2500	ARMED FORCES POLICE
AR	409.1250	407.2500	M.P.'S (CAPITAL PEAK SITE)
AR	406.9375	413.2375	ENGINEERS (CAPITAL PEAK)
AR	406.9375	413.2375	ENGINEERS / SITE LINK
AR	412.8750		CIVIL ENGINEERS
AR	413.4250		FT. LEWIS (C.I.D.)
AR	413.4125	408.4250	C.I.D.
CG	165.2625		SEATTLE
DOE	172.5000	168.3000	B.P.A. (EMERG. USE??)
DOE	172.5250	168.3250	BPA (KOD-965 OPS.)
DOE	172.5500	?	BPA (NEW - NASSELLE RIDGE)
DOE	411.8500		BPA LINK COSMOPOLIS TO ABERDEEN
DOE	412.2250		LINK COSMOPOLIS TO CAPITAL PEAK
DOE	417.4500		LINK ABERDEEN TO COSMOPOLIS
DOE	417.8250		LINK CAPITAL TO COSMOPOLIS
DOE	414.9250	408.5500	(CAPITAL PEAK SITE)
EPA	164.4500		UNCONFIRMED
FAA	165.7500		F-1
FAA	162.3000		PAGING - OLYMPIA
FAA	164.0500		SEATTLE ?
FAA	165.7375		SEATTLE
FAA	166.1750	165.4375	F-2 / WHX-30 / OLYMPIA
FAA	408.8250		SECURITY / SEATTLE - AUBURN
GSA	163.0250		AUBURN
HHS	165.3375		PAGING
I	034.8300		FISH & WILDLIFE (KKF-623)
I	167.7900		USER UNKNOWN - DATA
I	164.6750	169.8250	BUR. OF MINES - NO LONGER USED??
I	169.5000	171.5000	DAM CONTROL? (TONES)
I	169.5000	171.8250	U.S. COAST & GEOD. SURVEY
N	034.1500		WHIDBEY ISLAND NAS (RESCUE)
N	138.7200		BREMERTON SHIPYARDS F-2
USGS	168.1000		????
USGS	168.6750		????
USGS	168.0750		OLD ST. HELEN'S FREQ. (BIFC)
USGS	167.4250	167.1000	NEW ST. HELEN'S FREQ. (R & S)
USPS	164.9625		????
USPS	166.6125		????
USPS	163.3750		DIAL PAGER
USPS	164.7000		DISTRIBUTION DISPATCH
USPS	164.1750		SORTERS
USPS	418.3000		SECURITY??

That just about winds things up for this month. Hope you have a good month.

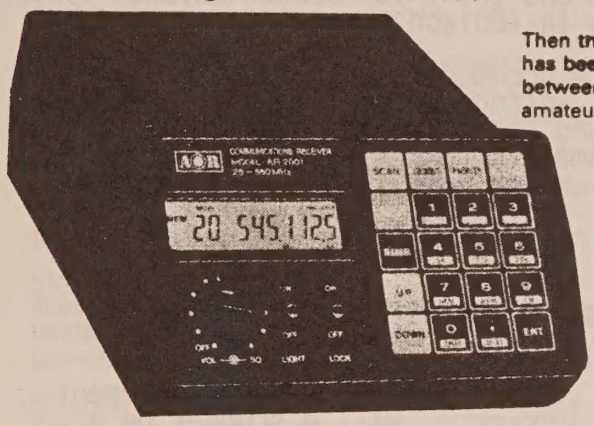
73's -
Denny

International

This column is for reporting two-way communications frequencies above 30 MHz, radio system details, monitoring experiences, and any other information relating to monitoring in countries other than the United States and Canada. Send to: Rickey Stein, 456 Barrymore Place, North Brunswick, NJ 08902.

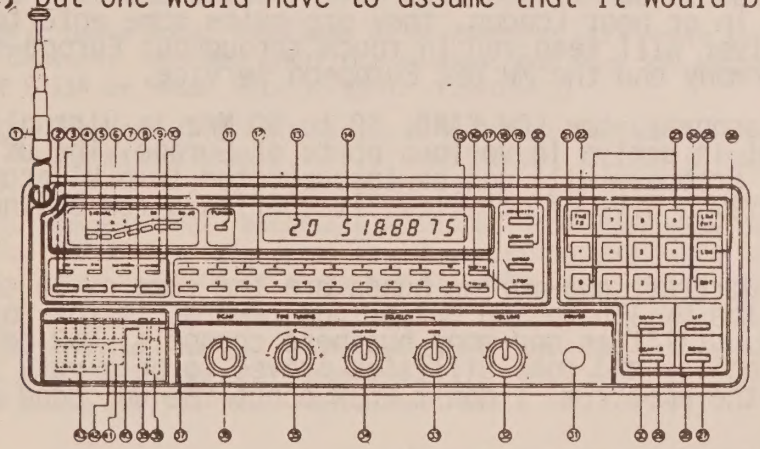
We start this month off with two receivers that were advertised in the British radio magazine Practical Wireless. This is a most interesting magazine and appears to have a number of ads for receivers before they are available here in the U.S. (or at least, before they are advertised here.)

The first unit is the Regency look-alike AOR-2001, a unit we showed in the Feb. 1984 Newsletter. Anyone with any additional information on the company or the radio itself is encouraged to drop me a note with thoughts or comments.



Then there is the new AOR2001. Information on this model has been available for some time – again general coverage between 25 and 555MHz and considered excellent for the amateur market at approximately £300.00.

The second unit is the JIL SX-400 which probably supersedes the SX-200/SX-200N. It looks like a most impressive unit but the hope is that JIL has worked out some of the bugs which have plagued the earlier 100 and 200 series receivers. There is no indication as to price, but one would have to assume that it would be more than $400 U.S.



For the many people who are interested in Scanning Receivers, there are three new models recently announced.
These are:-
the SX400 made by J.I.L. Japan who are, of course, well known for the very successful and popular SX200N.
The new model will cover from 26 to 520 MHz with no gaps and will receive in FM and AM. Priced at over £500.00 this receiver is destined for the professional market.

FUNCTIONS (FRONT VIEW)

1. Telescopic Antenna; 2. AM Switch; 3. AM Indicator Lamp; 4. FM Switch; 5. FM Indicator Lamp; 6. Signal Meter; 7. Narrow Indicator Lamp; 8. Narrow Switch; 9. Wide Indicator Lamp; 10. Wide Switch; 11. Tuning Meter; 12. 20 channel Memory Keys; 13. Memory Channel Display; 14. Frequency Display; 15. Scan Write, Minute Adjustment Key; 16. Memory Write, Hour Adjustment Key; 17. Stop Button; 18. Speed Change Key; 19. Priority Button; 20. Lock out Button; 21. Decimal Point Button; 22. Time & Frequency Selection Key; 23. Keyboard Frequency Selection Keys; 24. Frequency Entry Button; 25. Limit Entry Key; 26. Limit Key (ON/ OFF); 27. Down Seek Key; 28. Up Seek Key; 29. Scan B Button; 30. Scan A Button; 31. Power Switch; 32. Volume Control; 33. Squelch Control of WIDE; 34. Squelch Control of NARROW; 35. Fine Tuning Control; 36. Scan Delay Control; 37. Auto Noise Limiter Switch; 38. Change Switch of Squelch Mode; 39. Carrier ON/ OFF Switch; 40. Dimmer Control Switch; 41. Set Switch of Channel Space; 42. Change Switch of Channel Space (5 KHz/ 6.25 KHz); 43. Change Switch of Channel Space (10 KHz/ 12.5 KHz).

Geoff Halligey (OO?-ENG) writes with some additional notes for the vacationer (see Newsletter June 83). He writes:

In the UK, 'mains' means the electricity supply, not the drains. 'Earth' means ground. 'Continental Europe', or just 'the Continent' means all of Europe outside the UK.

Mains voltage in the UK is 240V/50Hz and on the continent it is generally 220V/50Hz. So don't plug anything in to the mains before adjusting voltage selector. (this goes for shavers too). Don't expect a 60Hz electric clock to tell the right time.

UK wall sockets (mains outlets) are a 3-pin type unlike anyone else's. The pins on the mating plugs are rectangular with a longer pin for earth that lifts a shutter concealing the a.c.

French wall sockets have 2 or 3 round pins; German sockets are different than the French; Italian, Greek and Spanish usually have just two round pins and they tend to be somewhat casual about safety.

To plug into a UK lamp socket, a push and twist is needed (bayonet type); most other European lamp sockets scew in (Edison type).

In most hotels, shaver sockets usually accomodate both round and US flat pin plugs; some also have a dual voltage switch. In one Portuguese hotel, my nearest wall socket was along the corridor outside. After that I added 15 feet of twinflexible to my small screwdriver and bagful of adaptors. Later on, battery operated shavers came on the market, and I thankfully left all the junk at home.

And that is really the answer- only carry battery operated gear- batteries are universally obtainable.

So much for the input side, now what you will hear and what equipment do you need? If English is your only languague, will a scanner be of much use on the continent?

If you like to travel light, you may find that a small transistor portable covering MW and FM 88 to 105MHz is adequate. In the UK, besides normal B C 88 to 98MHz, you will cover police and fire services. If you are staying in or near London, they are quite some entertainment. Such a receiver will keep you in touch throughout Europe through AFN stations in Germany and the MW BBC European service.

If you do bring a scanner, the LOW BAND, 30 to 50 MHz is virtually dead in the UK, but is active in various parts of Europe. The UK Low Band, 66 to 88 MHz probably will not be incorporated in a US scanner, but it is not exactly a hive of activity. It carries a few business channels.

The international aircraft and marine bands are the same as in the US, of course, but in the UK 136 to 170 MHz brings rewards in the form of police, ambulances, utilities and many business channels. 450 to 460 MHz, inhabited by police and some utilities proves to be a very interesting portion of the spectrum. I don't know about the UHF band on the continent.

Above all , be discreet. Broadcasting of police activity from an open window or hotel balcony could bring unpleasant consequences. Jail first, investigations afterwards, is the rule in some countries.

Thanks again Geoff for some very interesting information.

Until next month...שלום

Marketplace

Gary M. Darcy, Editor

Members may advertise, free of charge, items wanted, items for sale, and items for trade that are associated with the hobby of monitor/utility radio listening. No dealer ads will be accepted for this column. RCMA assumes no responsibility for the outcome of any transactions between members resulting from ads printed in this column. Send to:

RCMA MARKETPLACE, c/o Gary M. Darcy, P.O. Box 1329, Palmdale, CA 93550.

Please be sure to include your membership number.

All Marketplace ads will be accepted ONLY on special forms available from this column's editor. Send a self-addressed STAMPED envelope (business size) to the address above to receive a supply of forms. Foreign members do not need to include postage on envelopes they send.

FOR SALE: Realistic DX-150B. Good codition, except switch markings worn down. $50.00. Contact: L.P. BENJAMIN (CA-SR-002), 3986 Mesa Circle Dr.-201, Lompoc, CA 93436 or phone 805-733-4269. No collect calls. (12-30-83)

FOR SALE: Realistic 77-A. 8 channel crystal scanner; perfect condition. $80.00. Contact: L.P. BENJAMIN (CA-SR-002), 3986 Mesa Circle Dr.-201, Lompoc, CA 93436 or phone 805-733-4269. No collect calls. (12-30-83)

WANTED: Plectron R 721 (450-470) Patrol. Unit should be in good working and physical condition. Antenna and owners manual included; AC power cord, also. Contact: DAVID R. VAUGHN (OH-127), 1106 Grandview Ave., Columbus, OH 43212 or phone 614-488-3938. Phone calls after 2100 hrs. EST; no collect calls.(12-30-83)

WANTED: Regency TMR-1 U. Unit should be in good working and physical condition. Should include antenna, mobile mounting bracket plus AC/DC power cords. Contact: DAVID R. VAUGHN (OH-127), 1106 Grandview Ave., Colombus, OH 43212 or phone 614-488-3938. Phone calls after 2100 hrs. EST; no collect calls. (12-30-83)

FOR SALE: Sears Hi & Lo VHF/UHF Scanner - Model # 564.3630. Crystal controlled. Includes all original accessories, 12 crystals for St. Paul/Minneapolis, and UPS shipment. $100.00. Contact: JOHN ENGER (MN-042), 1022 Tiller Ln., St. Paul, MN 55112 or phone 612-484-9544. (12-17-83)

FOR SALE: Radio Shack P-10 crystals. Send SASE for list. $3.00 each. Contact: RANDY ROESEMEIER (IN-075), 904 S.E. H St., Apt. A, Bentonville, AR 72712.(12-19-83)

FOR TRADE: Sears Model 836 (same as BC-210XL). Will trade for Regency M-100 or M-400. Contact: RICHARD AVERY (CA-AL-020), 204 West 200 North #302, Salt Lake City, UT 84114 or phone 801-532-5380. (12-05-83)

FOR SALE: February 1983 state index Microfiche; selling by individual state; Idaho & Oregon already taken. $2.50 each state. Contact: CASEY CROOKHAM (OR-054), Rt. 6 Box 242, Caldwell, ID 83605. (12-8-83)

FOR SALE: Bearcat 100. Excellent condition. Includes case, antenna, ni-cads, & charger. Will ship UPS. $200.00. Contact: THOMAS PAMIN (PA-003), 3151 W. 25th St., Erie, PA 16506 or phone 814-833-5729. Call after 1700 EST. (12-08-83)

FOR SALE: Bearcat 100. Includes charger, earphone, Ni-cad batteries, BNC connector for antenna, and new 9" rubber duckie antenna, and case. Operates great. $225.00. Contact: GARY L. STURM (IN-045), 1506 West Hively Ave., Elkhart, IN 46517 or phone 219-522-0621. No collect calls. (12-25-83)

photo department

Send photographs of custom monitor listening posts, unusual or extensive monitor or two-way antenna systems, user station consoles (PD, Fire, Paramedics, etc.) or other monitor/two-way related equipment of interest. Photographs must be 3 x 5 inches or larger, black-and-white with good contrast, sharply focused and attractively composed. Each photo must be accompanied by details and explanations of equipment. Photos will not be returned. If you have questions, write first and please include an SASE. Send photos or write to:

Hugh Stegman, 11622 Exposition Blvd., #2, Los Angeles, CA 90064

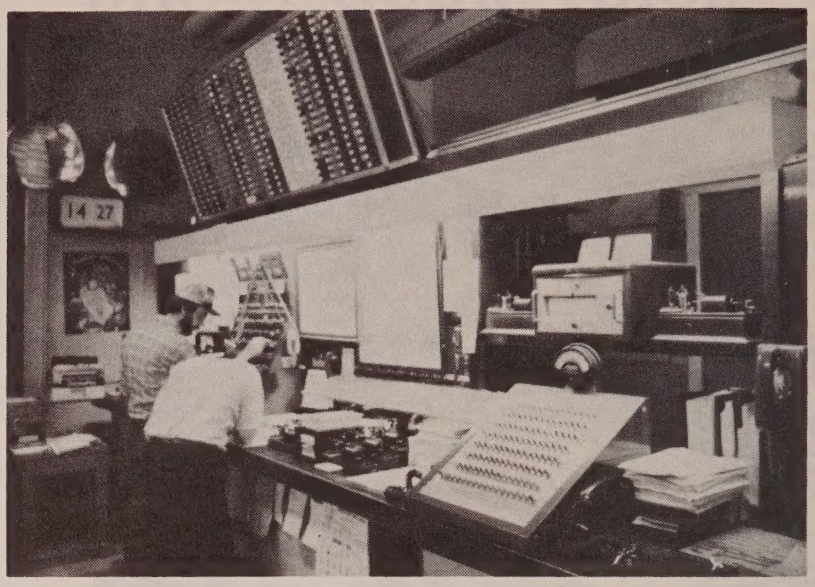
Greetings from sunny California, which for once lived up to its PR, with a high temperature of 82 today. Just thought I'd help the local real estate business! Anyway, it's time to get at that big bunch of photos from Ed Sirovy (IL-004). These show the members of RCMA's Chicago chapter touring their city's Main Fire Alarm Office. This is a very old facility, and every time another new technology came in, it just got shoehorned in next to the older stuff. Thus this column not only shows how a big city handles its fire calls, but also sort of a history of such dispatching. As a matter of fact, this is the site that dispatched equipment to the wrong location in the great 1871 fire, which is why the original building is no longer standing.

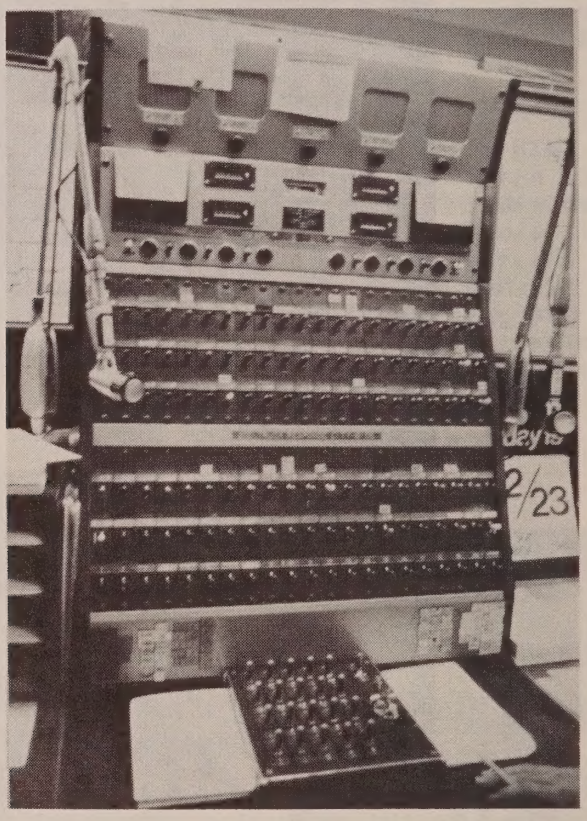
The Main Office still handles all fire calls north of 39th St., including the downtown "Loop" and busy O'Hare Airport. Its personnel are not sworn officers, but members of the electrician's union, in a holdover from the original days of wireline telegraphy. A lot of this gear looks pretty funky by today's standards, but it works and with less downtime then CRT's.

First up is the overall view, complete with the RCMA members looking it all over. In left foreground is part of the wireline counter. In the center is the main table, which is divided into the telephone answering position (foreground) and the radio side (mostly hidden behind the filing cabinets). To the far right are racks for radio receiver voters, NAWAS telephones, controls for air raid sirens, terminals for dedicated phone lines to fire stations, and a base radio for NIFERN (the Northern Illinois Fire Emergency Radio Network). In the very back of the room are the telegraph units for the city's fire alarm boxes.

The next shot is of the radio position. Note the small status board in front of the consoles. Dispatchers also talk over PA speakers in firehouses. Telephones can be connected over the telegraph wires, the city's own phone lines, or the regular Bell system.

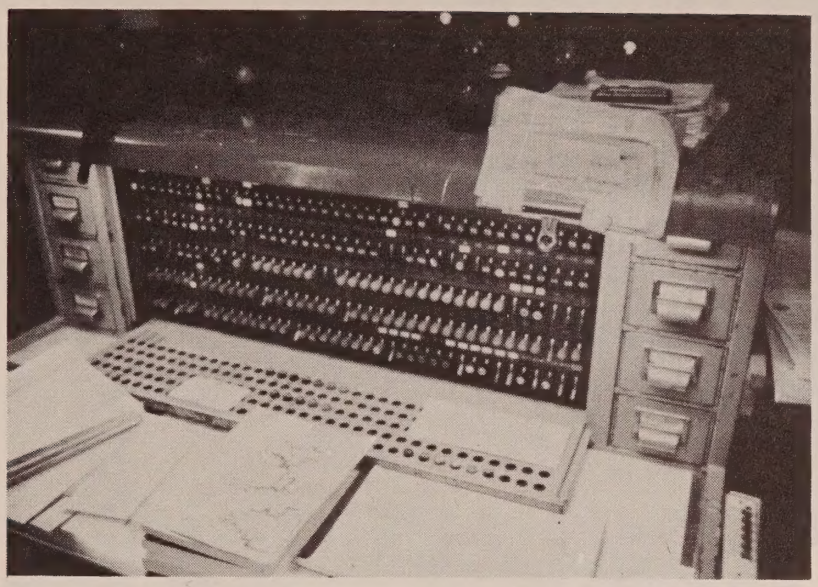
Next we see the status map, with its control console being manned below. The unit at left is a paper recorder for fire boxes. At rear is the wireline counter, and part of another status display. The close shot of the status console reveals how it operates. When a company leaves its quarters, its light is turned off and the tab (switch handle) removed. If another company is moved up into the firehouse, its own tab is used to turn the light back on.



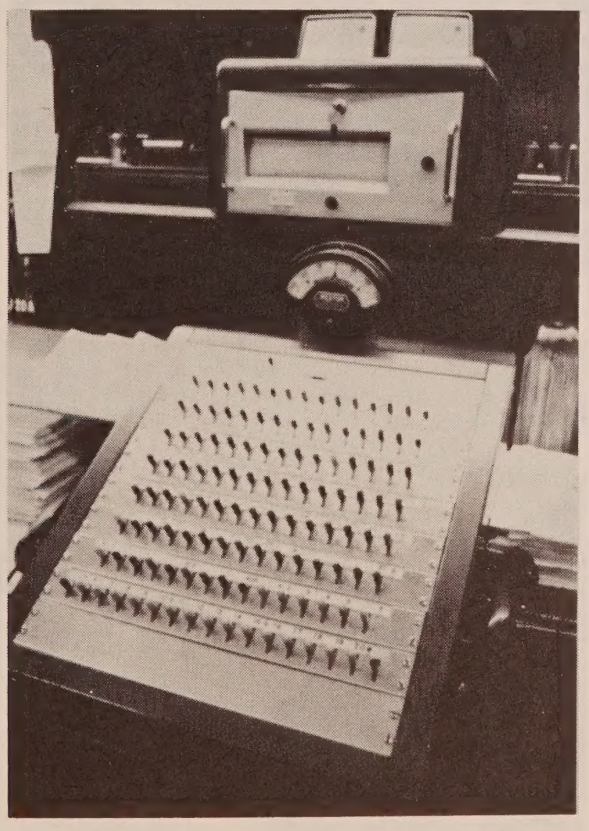


Shot #5 is of the wireline counter, with the status board up above. The operators are shown dispatching a fire. Just to their right are some of the electro-mechanical telegraph repeaters. Behind them is a firehouse PA console, shown closer in the next shot. Two operators can talk to different sets of fire stations at once, and still more can obviously be contacted by radio. Yes, that <u>is</u> a telegraph "straight key" just above and left of the hand shown.

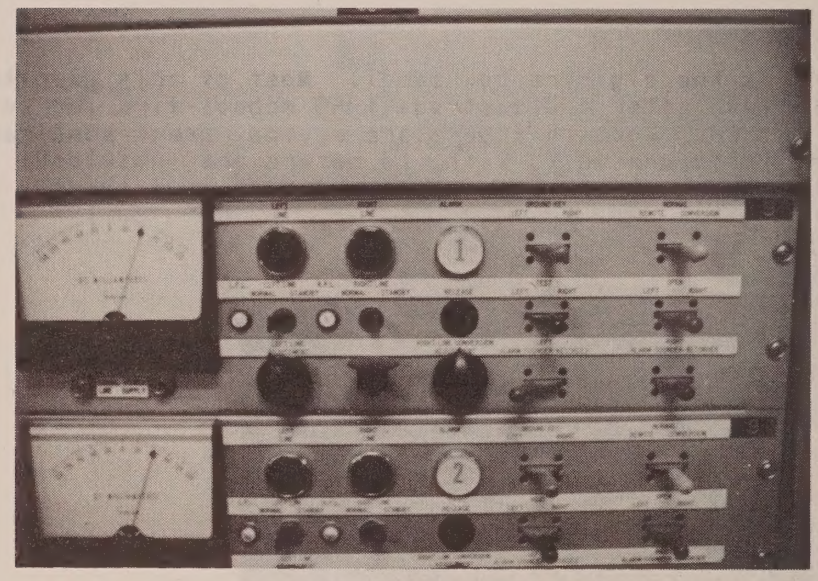
A telegraph line test board is shown in the next close shot. Phone handsets are for talking over the lines. Another fire box recorder is at top. Note the old meter in the middle.

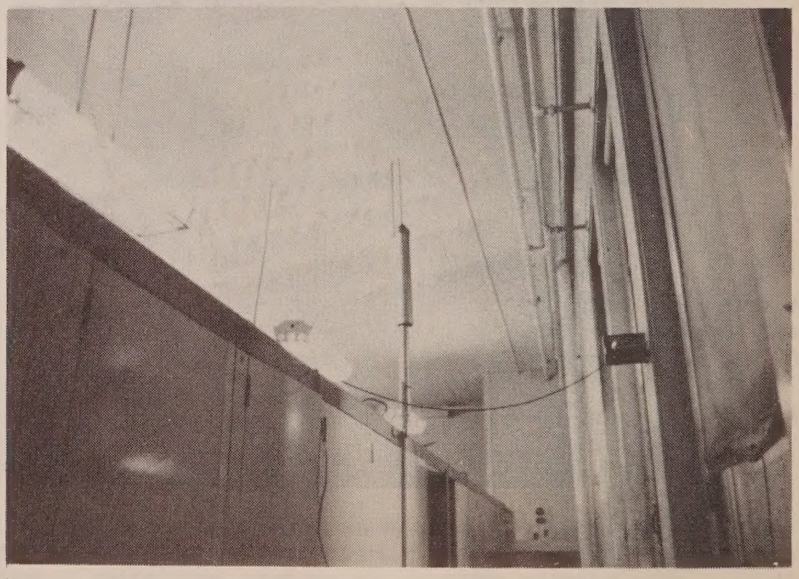


Finally, here is the big fire box panel. Most of this gear is from the early sixties, after a disastrous 1959 school fire led to an upgrading of the system. More recorders are at top, power supplies are at center, and the other units with the meters are individual line terminations. The next photo is a closeup of two of these.

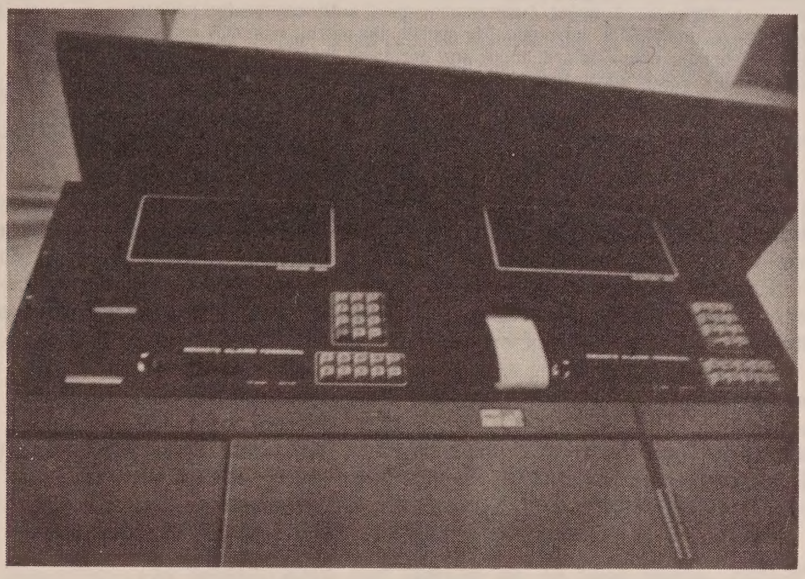


LOOP ALIVE!





For proof that radio was something of an afterthought here, consider this Motorola "tin can" antenna mounted atop the RF rack, indoors, with some of the world's tallest buildings all around. This is the NIFERN base antenna! Ed says that now he understands why coverage of the suburbs is so bad! The bent-wire affair to the left is for a monitor receiver, and on the wall is a CB antenna (busted).



Our last photo is for folks like the local RCMAniac who told me, "Don't be ridiculous; Chicago has a nifty new Motorola fire center, with CAD and microwave and everything... I saw it in YOUR column." Well, there IS such a setup, and it WAS in the Feb '82 Photo Dept., and, no, it is STILL not fully operational. Our picture shows the digital equipment that will relay box alarms when and if. Ed says that everything stopped when Chicago planned to get rid of the old alarm boxes, but then could not afford the 1000 phone lines for protection of schools, theaters, etc.. So 3 mayors and 4 fire commissioners later, the new place sits in limbo without status maps or wireline terminals, and the clunky old gear continues yeoman service.

Ed notes that getting rid of the box alarms would be a bad idea since there would be no backup if the telephone network failed. Funny he should bring this up. Los Angeles got rid of its boxes a while back, and last December the phones did all go down. For hours, fire helicopters hovered over the city looking for smoke, while absolutely no traffic came into LAFD. So it's worth repeating that had Chicago's boxes been believed rather then a lookout at the courthouse in 1871, we wouldn't have a Fire Prevention Week today.

Before I take up the whole Newsletter, I had better end this column. See you next month.

Public Safety

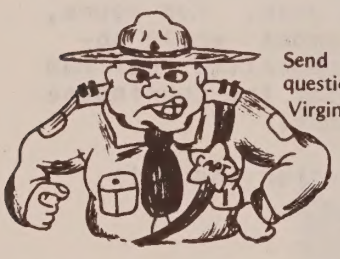
This column is for reporting Public Safety and Special Emergency frequency information, radio system details, radio codes, dispatch areas, unit numbering systems, etc. for police, sheriff, fire, forestry (except USFS), fish and game, highway patrol, state police, prisons, prisoner work camps, local government, highway & street maintenance, port authority/bridge maintenance, animal control, ambulances, paramedics, hospitals, life guards, ski patrol, search & rescue, flood control, civil defense and disaster organizations. Input and questions for this column must be sent to the proper regional Public Safety editor listed below.

STANDARD TEN SIGNALS

The RCMA recognizes that most Public Safety Departments use "ten signals" as a part of their standard communication procedure. Our editors will not print the more common signals, which are listed below, but will note additions and differences when listing a departments "ten signals". By not having to print the below listed signals repeatedly, we will save valuable space for additional data. Only differences and additions to this listing will be noted by editors. Please refer to this listing when monitoring. Any corrections or additions will be noted during coverage by the editor.

10-1	Receiving poorly	10-33	Emergency
10-2	Receiving well	10-36	Correct time
10-3	Stop transmitting	10-41	Beginning duty tour
10-4	Okay, acknowledgement	10-42	Ending duty tour
10-5	Relay	10-43	Information
10-6	Busy	10-50	Accident (F, PI, PD)
10-7	Out of service	10-51	Wrecker needed
10-8	In service	10-52	Ambulance needed
10-9	Repeat	10-55	Intoxicated driver
10-13	Weather / Road conditions	10-56	Intoxicated pedestrian
10-18	Quickly	10-57	Hit & run accident (F, PI, PD)
10-19	Return to ----------	10-70	Fire alarm
10-20	Location	10-71	Advise nature of fire
10-21	Call ------- by telephone	10-72	Report progress of fire
10-22	Disregard	10-73	Smoke report
10-23	Arrived at scene	10-74	Negative
10-24	Assignment completed	10-76	Enroute
10-25	Report in person to ---------	10-77	Estimated time of arrival
10-27	Drivers license information	10-82	Reserve lodging
10-28	Vehicle registration information	10-88	Telephone number of ------
10-29	Check for wanted	10-99	Wanted / Stolen is indicated
10-30	Unnecessary use of radio	10-0 / 10-100	Use caution

PUBLIC SAFETY — SOUTH EAST:



Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows — Florida, Georgia, N. Carolina, S. Carolina, W. Virginia, and Virginia:

William Mauldin, 2268 N.W. 30th Rd., Boca Raton, FL 33431

Welcome to another edition of the Public Safety Southeast! Before we get into any of the data submitted this month, I have a special request. As most of you realize, this article and, in fact, the entire RCMA CLUB is run by members, for members. Without your membership, there would be no club. Without your contributions, there would be no articles. It is just that simple. Your editors need your CONTINUED input and support, as we can not and do not invent the material printed each month. I'm aware that you hear this from each of us each month, but it is necessary in order to keep the information flowing!

IMPORTANT REQUEST! I need a listing from EVERY MEMBER living in my coverage area within the next 30 days as to what kind of scanner(s) you have, and a listing of what you monitor on a regular basis! Following receipt of this information, the future columns this year will be directed to those areas where there is member interest! To put it very simply, for example, if I don't hear from anybody in YOUR AREA, you aren't going to see much in print

for YOUR area. ALL areas responding will be on my computer list for all possible coverage! To make the column more interesting, YOUR input is absolutely necessary!!

I know this has not been undertaken by any editor in the past. But, you can clearly see how this response from each and every one of you will be helpful in building and writing our data for the next 12 issues! PLEASE do your part and send me the following:

1. The make and model of any scanners and monitors that you use.
2. List the frequencies and agencies that you monitor on a regular basis.
3. List the frequencies and agencies that you sometimes monitor.
4. What percentage of your time is spent monitoring at work, home and mobile.
5. List the departments that you would like to see covered in upcoming editions.
6. Do you think editors should cover departments completely or just print updates?
7. Do you keep a personal frequency notebook and/or past RCMA Newsletters?
8. If you keep past RCMA Newsletters, what is your oldest copy?
9. Do you plan to buy a new scanner, if so what and when?
10. What can the editors do to improve our club publication?

This information will assist me in building a file on what you want to see in this section of our club magazine! Your name and address are not required! If you want to add them, that is fine, but it is not necessary. If you monitor the State Police, the power company, and the local laundry, let me know! You spent $16.50 on your membership. Take five minutes to get what you paid for, as the saying goes. I want to know what you are listening to and what you want to see in print. After all, this is your club! PLEASE respond to this request TODAY! If YOU are not in the Southeast area, respond to this request and I will print the results so your editor will know what you want to see in his section!

Send the information to me: Capt. Bill Mauldin, 2268 N.W. 30th Road, Boca Raton, FL 33431. The results of the survey will be printed next month in this column. Please make every effort to respond within the next two weeks! YOUR NAME is not necessary unless you want to send it. Futher comments at in the CLOSING COMMENTS section.

From Mike (GA-???): The Dekalb EMS has started on 24 hour shifts. Earlier this year, the EMS personnel were working 8 hour shifts. At present, they have 11 EMS units, however, expansion to 14 is planned. The fire department arson investigators are now handled by the police, and the FD has added an aerial unit, a rescue unit and a pumper to the inventory!

Atlanta Airport Maint.	852.9625 MHz	
Atlanta Airport Emergency	853.4625 MHz	
Atlanta Airport EMS	463.0250 MHz	
Atlanta Airport Fire	154.1900 MHz	Dispatched by Atlanta FD
Atlanta Airport Police	852.4625 MHz	Dispatched by Atlanta PD
Atlanta Airport Police	155.625 MHz	Atlanta Airport VHF Freq

Dean (NJ-???) advised that the Deerfield Beach (FL) Police Department is going 800 MHz! Here is the new frequency listing: 856.7625 MHz, 857.7625 MHz, 858.7625 MHz. This will be a multi-channel system, not a trunk system!

Continued on next page

Get A FCC HAM LICENSE In Just 9 Weeks!

The FCC goes public with all amateur radio test questions. Volunteer Hams will give the tests.

A code & theory home-study course prepares you to pass your Ham Radio Test and receive FCC call letters. No previous electronics background required. All 200 novice test questions and answers covered in our tapes and book. Have fun learning the code with our tape cassettes.

GUARANTEED PASS! Send for more details, or $64.00 for the complete beginners course, now!

Gordon West Radio School 2414 College Dr., Costa Mesa, CA 92626

PAID ADVERTISEMENT

My sincere thanks to James, NC-055, for this extensive listing for **Eastern North Carolina!** I realize that some of these frequencies belong in other sections of the NEWSLETTER, however, I have elected to list everything James has submitted. It should provide for some very interesting listening for those of you in North Carolina!

MONITORING EASTERN NORTH CAROLINA

Weather Broadcasts: New Bern NC 162.400 MHz; Norfolk VA 162.400; Myrtle Beach SC 162.400 MHz; Rocky Mount NC 162.475 MHz; Raleigh NC 162.475 MHz; Fayetteville NC 162.475 MHz.

POLICE & SHERIFFS: Craven County Sheriff 154.770 MHz, 156.210 MHz; Martin County Sheriff 155.850 MHz; Goldsboro Police 155.850 MHz, 155.580 MHz, 155.730 MHz - Goldsboro PD repeater 154.785 MHz; Kinston Police 155.130 MHz & 155.430 MHz; North Hampton County Sheriff 154.740 MHz; Orange County Sheriff 154.725 MHz; Jones County Sheriff 154.800; Lenior County Sheriff 155.430 MHz; Chesapeake VA Police (repeater) 155.130 MHz; Beaufort County Sheriff 155.115 MHz; Pitt County Sheriff 155.415 MHz; East Carolina University Police 155.485 & 155.490 MHz; Craven County Sheriff 156.210 MHz; Edgecombe County Sheriff 155.705 MHz; Greene County Sheriff 155.460 MHz; Pitt County Sheriff 156.030 MHz, 158.850 MHz; New Bern Police 155.685 MHz; Jones County Sheriff 155.970 MHz; Virginia Beach Police 158.790 MHz.
FIRE DEPARTMENTS: MarMac VFD Goldsboro NC 154.445 MHz; Kinston & Lenior County VFD 460.625 MHz; Wayne County VFD 154.310 MHz; Craven County VFD 154.400; Greenville VFD 154.415 MHz; Raleigh FD 154.370 MHz; Virginia Beach FD 154.370 MHz; Lenior County Hospital 155.295 MHz.

James comments that he has logged about 30 towns and counties working hospital and rescue traffic on 155.280 MHz and 155.340 MHz. (Editors Note: 155.340 is the main frequency used by the North Carolina Rescue Squad Assn., state-wide.) James has noted that he has received some public safety stations on the 132 MHz portion of his scanner. Since this is an aircraft frequency, I have not listed these frequencies as they represent an intermodulation condition and would probably only pertain to the scanner that James is using and to his location. James has requested that I note his name and address, as he is interested in hearing from other members in North Carolina. James B. Rouse (NC-055), 312 Cherry Lane, Kinston, NC 28501.

From N.P. Oliver (NC-029), this excellent contribution: Dare County Sheriff, Kill Devil Hills Police, Nags Head Police, Manteo Police, Southern Shores Police all operate on 460.250 MHz (Sheriff in Manteo acts as Central Dispatch on this channel)and 460.375 MHz (F2, Primary Dispatch). Nags Head Police also has 460.475 MHz (Primary Dispatch) and 460.375 MHz (Car to Car). Many stations in Eastern North Carolina use 39.100 MHz as a mutual aid channel. (Editors Note: This used to be the command dispatch frequency for about 90% of the sheriff's departments in the Eastern North Carolina area. Also, all 155.190 MHz is the official North Carolina law enforcement Mutual Aid frequency. The system is based on "Secode" (TM) dialing which emits tones for dialing, alerting and opening the speakers of monitoring stations.) Elizabeth City PD 460.200 MHz (Primary Dispatch); U.S. Navy Security 148.410 MHz (monitored by most police and sheriff dispatch centers along the outer banks). USCG and most Navy and law enforcement agencies also monitor Marine Channel 23, 157.150 MHz. National Park Service on the outer banks 164.725 MHz (also monitoed by USN, USCG, and many of the local police dispatch centers); NC Wildlife Commission (outer banks) 159.315 MHz; NC State Marine Fisheries 159.225 MHz; NC State Forestry 31.460 MHz; Outer Banks Rescue Mutual Aid 155.250 MHz; Outer Banks Beach Life Guard Service (Dare County) 33.080 MHz; Elizabeth City Life Saving Service 47.460 MHz; County Wide Fire for Manteo, Kill Devil Hills, Manns Harbor, Kitty Hawk 39.100 MHz; Nags Head VFD 39.580 MHz; Buxton VFD 46.120 MHz; Hatteras & Frisco VFD 39.900 MHz.

N.P. also sent in some excellent maps on the North Carolina State Highway Patrol system which we will be printing when we do an update on the patrol very shortly! (Editors Note: Noah Oliver is the publisher of the Louisiana Frequency Exchange, Post Office Box 45913, Baton Rouge, LA 70895. We do thank him for a copy of the publication and wish him well in his efforts of keeping track of Louisiana.)

Landon, VA-077, submits these additions and notes to lasts months **"MONITORING ROANOKE VIRGINIA"**. Those of you having interest in monitoring Western Virginia should note these additions to last month's article!

MONITORING WESTERN VIRGINIA

39.500 MHz	State-wide Mutual Aid used by most police & sheriffs
39.540 MHz	State-wide MOBILE Mutual Aid used by police, SO and VSP
166.900 MHz	Park Rangers, Shennandoah National Park (166.300 MHz input)
159.330 MHz	Forest Service, Staunton (Hogback Mountain repeater) also Charlottesville

151.370 MHz	Forest Service, Staunton, Charlottesville, Richmond transmitters
159.435 MHz	Virginia Games Wardens, state-wide repeaters
151.340 MHz	Input to the repeaters in SOME locations, not statewide.

(Here is a very interesting note regarding ROANOKE! The Airport Police and city garbage trucks operate on the SAME PUBLIC WORKS frequency... 155.025 MHz! Remember my comment last month as to why Public Works and Local Government frequencies should not be over looked, as many double as police frequencies!)

39.120 MHz	Virginia Department of Corrections
39.320 MHz	Police: Richlands, Tazell County/City, Bluefield
39.400 MHz	Police: Marion, Chilhowie, Saltville, Smyth County
39.420 MHz	Police: Norton, Wise, Pound, St Paul, Wise County
39.440 MHz	Police: Lebanon, Honaker, Castlewood, Russell County
39.500 MHz	Central dispatch frequency for majority of SW VA county sheriffs
39.540 MHz	SURGE CHANNEL for State Police communications with local depts.
39.560 MHz	Police: Fries, Galax, Independence, Grayson County
39.580 MHz	Auxiliary frequency for Smyth County Police
39.600 MHz	Police: Clintwood, Hayes, Dickenson County
39.620 MHz	Police: Abington, Glade, Spring, Damascus, Washington County
39.640 MHz	Police: Rural Retreat, Wytheville, Ft. Chiswell, Wythe County
39.980 MHz	Bluefield Police dispatch
42.420 MHz	Tennessee Highway Patrol heard in western Virginia
42.600 MHz	North Carolina Highway Patrol heard in western Virginia
45.320 MHz	Washington County Fire and local government
45.120 MHz	Chilhowie local government and Fire dispatch
47.220 MHz	Virginia Highway Department
154.250 MHz	Bristol Fire dispatch
154.800 MHz	Bristol Police dispatch
155.010 MHz	Kingsport (TN) Police, heard in western Virginia
155.100 MHz	Bluefield Police dispatch
155.160 MHz	Washington County Life Saving
155.205 MHz	Bristol Life Saving
155.280 MHz	Smyth County Life Saving
155.295 MHz	Russell County Life Saving
155.340 MHz	Virginia Hospitals and Rescue Squads (lots of use!)
155.580 MHz	Bristol Police 155.595 MHz Bristol Police
155.595 MHz	Sullivan County Police (TN) heard in western Virginia
155.700 MHz	Bristol (TN) Police, heard in western Virginia
156.210 MHz	Tennessee Highway Patrol (car to base) heard in western Virginia
171.575 MHz	Forest Service

(Many thanks to both John Martin and Landon (VA-077) regarding the above confirmed listing!)

Alan (MD-???) and David (LA-031) send in this confirmed listed for the State of Virginia and Arlington County. Even though we have run some of each listing recently, here is what David sent in as being confirmed:

<u>VIRGINIA STATE POLICE:</u>

Ch 1	158.985 MHz Base	154.905 MHz Mobile
Ch 2	159.000 MHz Base	154.935 MHz Mobile
Ch 3	159.135 MHz Base	155.445 MHz Mobile
Ch 4	159.165 MHz Base	155.460 MHz Mobile
Tac 1	154.695 MHz	Tac 2 154.665 MHz

VIRGINIA STATE POLICE - Divisions and Frequency Assignments:

Division 1	Richmond	Channel 1 Primary
Division 2	Culpepper	Channel 3 Primary
Division 3	Appomattox	Channel 3 Primary
Division 4	Wytheville	Channel 2 Primary
Division 5	Chesapeake	Channel 2 Primary
Division 6	Salem	Channel 1 Primary
Division 7	Alexandria	Channel 3 Primary

The old Virginia State Police low band frequencies are still in use in selected areas. Here is what has been confirmed:

Division 1	Richmond	42.880 Base	42.680 Mobile
Division 2	Culpepper	42.860 Base	42.700 Mobile

Car to Car low band is 42.920 MHz

VIRGINIA DEPARTMENT OF TRANSPORTATION:

Channel 1	47.220 MHz	Channel 3	47.300 MHz
Channel 2	47.340 MHz	Channel 4	47.280 MHz

39.500 MHz is confirmed as "Inter-system" and "sheriff's netwok", and 39.540 MHz is confirmed as "service channel".

MONITORING ARLINGTON COUNTY, VIRGINIA

(Additional information, codes and frequencies can be found in August 1983 RCMA Newsletter)

FIRE & RESCUE:

Ch 1	154.130 MHz	Fire/Rescue Dispatch (153.890 MHz input)
Ch 2	155.865 MHz	Fire Ground & Administrative
Ch 3	154.280 MHz	Mutual Aid (for Washington DC Fire Department)
Ch 4	154.265 MHz	Mutual Aid (for Northern Virginia area departments)
	453.050 MHz	Data/Status (Modad) NO Voice
	155.340 MHz	H.E.A.R. Channel (All Medics)

(Note: Main MED channel is MED 7)

LOCAL GOVERNMENT:

	155.055 MHz	Arlington County, Local Government
	158.805 MHz	School Board repeater (155.895 MHz input)
	159.120 MHz	County Highway Maint.

POLICE:

Ch 1	453.825 MHz	County Police, South County Patrol
Ch 2	453.500 MHz	County Police, North County Patrol
Ch 3	453.275 MHz	County Police, Secondary for Ch 1 Patrol
Ch 4	453.325 MHz	County Police Detective Division
Ch 5	453.100 MHz	County Police Vice Division

(Other frequency notes: 39.500 MHz; 39.540 MHz; 154.740 MHz; 158.790 MHz; 453.550 MHz Intersystem Police; 453.600 MHz Sheriff.)

FIRE STATIONS AND VEHICLE IDENTIFICATION: "7" is an added prefix of the station ID.

#1	1041	South Edgewood St	Wagon 71, Engine 71, Medic 71
#2	4815	N. Wilson Blvd	Wagon 72, Engine 72, Res Truck 72
#3	3900	N. Lee Highway	Wagon 73
#4	3121	N. 10th St	Wagon 74, Eng 74, Truck 74, Medic 74
#5	735	S. 18th St	Wagon 75, Engine 75, Medic 75
#6	6929	N. Lee Highway	Wagon 76, Engine 76, Truck 76, Medic 76
#7	3116	S. Abingdon St.	Wagon 77
#8	4845	N. Lee Highway	Wagon 78, Engine 79, Truck 79
#9	1900	S. Walter Reed Drive	Wagon 79, Engine 79, Truck 79
#10	1559	N. Wilson Blvd	Wagon 70, Engine 70
Fire Chief		Office, 1020 North Hudson Street	

(Note: Station 1 to 7 (71 to 77) have Fire Chief on staff
Fire Marshal Numbers: (FM) 71 thru 79 (1 to 9) have Fire Marshal on staff.

MONITORING GEORGIA SHERIFF'S COMMUNICATIONS

The Interstate Communications System used by the Georgia sheriffs is one of the most complex in use in the southeast. The system use to operate on 42.020 MHz statewide, along with the Georgia State Patrol, however, recently the system has moved to the high band, using 154.905 MHz (Base to car) and 154.935 MHz (Base to base). The 154.905 MHz channel is used also for mobile to mobile simplex.

Assignment of radio call numbers for each of the 159 counties is listed below. These ID numbers are used by sheriffs, county police and some of the smaller city police departments operating on the inter-state radio system frequencies. Only law enforcement officers assigned to a police department which has been licensed by the FCC, and engaged in regular police duties are allowed to use the inter-state communications system. Each department qualified to use the system must request car numbering assignment before transmitting.

The following list is a breakdown of the radio call numbers, assignments and how to understand the ID numbers you are hearing:

County	S.O.	C.P.&M.	County	S.O.	C.P.&M.
Appling	601	602	Franklin	717	718
Atkinson	603	604	Fulton	719	720
Bacon	605	606	Gilmer	721	722
Baker	607	608	Glascock	723	724

Public Safety - South East continued

Baldwin	609	610	Glynn	725	726
Banks	611	612	Gordon	727	728
Barrow	613	614	Grady	729	730
Bartow	615	616	Greene	731	732
Ben Hill	617	618	Gwinnett	733	734
Berrien	619	620	Habersham	735	736
Bibb	621	622	Hall	737	738
Bleckley	623	624	Hancock	739	740
Brantley	625	626	Haralson	741	742
Brooks	627	628	Harris	743	744
Bryan	629	630	Hart	745	746
Bulloch	631	632	Heard	747	748
Burke	633	634	Henry	749	750
Butts	635	636	Houston	751	752
Calhoun	637	638	Irwin	753	754
Camden	639	640	Jackson	755	756
Candler	641	642	Jasper	757	758
Carroll	643	644	Jeff Davis	759	760
Catoosa	645	646	Jefferson	761	762
Charlton	647	648	Jenkins	763	764
Chatham	649	650	Johnson	765	766
Chattahoochee	651	652	Jones	767	768
Chattooga	653	654	Lamar	769	770
Cherokee	655	656	Lanier	771	772
Clarke	657	658	Laurens	773	774
Clay	659	660	Lee	775	776
Clayton	661	662	Liberty	777	778
Clinch	663	664	Lincoln	779	780
Cobb	665	666	Long	781	782
Coffee	667	668	Lowndes	783	784
Colquitt	669	670	Lumpkin	785	786
Columbia	671	672	McDuffie	787	788
Cook	673	674	McIntosh	789	790
Coweta	675	676	Macon	791	792
Crawford	677	678	Madison	793	794
Crisp	679	680	Marion	795	796
Dade	681	682	Meriwether	797	798
Dawson	683	684	Miller	799	800
Decatur	685	686	Mitchell	801	802
DeKalb	687	688	Monroe	803	804
Dodge	689	690	Montgomery	805	806
Dooly	691	692	Morgan	807	808
Dougherty	693	694	Murray	809	810
Douglas	695	696	Muscogee	811	812
Early	697	698	Newton	813	814
Echols	699	700	Oconee	815	816
Effingham	701	702	Oglethorpe	817	818
Elbert	703	704	Paulding	819	820
Emanuel	705	706	Peach	821	822
Evans	707	708	Pickens	823	824
Fannin	709	710	Pierce	825	826
Fayette	711	712	Pike	827	828
Floyd	713	714	Polk	829	830
Forsyth	715	716	Pulaski	831	832
Putnam	833	834	Towns	877	878
Quitman	835	836	Treutlen	879	880
Rabun	837	838	Troup	881	882
Randolph	839	840	Turner	883	884
Richmond	841	842	Twiggs	885	886
Rockdale	843	844	Union	887	888
Schley	845	846	Upson	889	890
Screven	847	848	Walker	891	892
Seminole	849	850	Walton	893	894
Spalding	851	852	Ware	895	896
Stephens	853	854	Warren	897	898
Stewart	855	856	Washington	899	900
Sumter	857	858	Wayne	901	902
Talbot	859	860	Webster	903	904
Taliaferro	861	862	Wheeler	905	906
Tattnall	863	864	White	907	908

Public Safety - South East continued

County	S.O.	C.P.&M.	County	S.O.	C.P.&M.
Taylor	865	866	Whitfield	909	910
Telfair	867	868	Wilcox	911	912
Terrell	869	870	Wilkes	913	914
Thomas	871	872	Wilkinson	915	916
Tift	873	874	Worth	917	918
Toombs	875	876			

Each county is assigned two basic numbers. Each number will be preceded with a letter and will end with a letter. The first letter designates the department. The number designates the county, and the last letter designates the car number.

S = Sheriff's Department

CP = County Police

M = City Police

A through Z - End letter is the car number. Example: S695A is a Douglas County Sheriff's Car Number "A".

CLOSING COMMENTS: At the start of this article, there is a request for each reader to take a few minutes and answer several questions. I do hope you will take a minute to do just that TODAY. I will make this request again next March. Between now and then, every article will be based on the results of the survey. Should you ask for articles on departments not located in this coverage area, the requests will be submitted to those who cover the material. I urgently request that YOU speak up and tell what you want to read, and don't allow others to pick the content of the next twelve issues! By knowing who is reading the articles, what you are listening with and to what, we can gear the articles to the interests of the active members! I need your input within the next two weeks, if possible. Check the questions again and please send in your answers. Don't let others run your club without your input!

I recently purchased one of the new RADIO SHACK PRO 30 portable scanners! It a most impressive portable. My unit, serial #305703, was purchased at list price from the Radio Shack store in the Greenspoint Mall, Houston, Texas. I turned the unit over to Steve Kayworth, the Tech Topic editor, last night for extensive testing. Although I will leave the final test numbers and comments to Steve, I would like to add a few remarks. The unit receives better than I had expected - much better - on all bands. I have carried the unit with me to the worst listening areas of Miami, Houston, San Francisco and Los Angeles. There has been no intermod! The radio receives better than the specification list on all bands. Generally speaking, I like everything about it except the case. It is much larger than the Bearcat 100 and does not look all that professional. My unit has had some problems with the frequency display, but it is not a constant problem. The top part of some of the numbers are not there all the time. If the problem becomes constant, I will return the unit to Radio Shack for repairs. I hate problems which only show up when "they" want to! The keyboard is easy to work (once you read the directions) and beeps when used. The unit comes with a belt clip, covers more frequencies than most scanners, and overall, I am very pleased with it! The coverage of 30 - 54 MHz; 108 - 136 MHz (AM!); 138 - 174 MHz; and 380 - 512 MHz is excellent and impressive! Steve will have a report, I am sure!

RADIO SHOWS: Charlotte NC and Orlando FL both have their BIG radio shows the weekend of March 17 and 18! Since this article is being written in December, I do not have admissions or locations, but they can be obtained from most any amateur radio operator! These are two of the best shows! If you want to see an excellent show, attend one of these!

Columbus, GA has noted that they expect to have their annual hamfest during the weekend of March 24 and 25. Again, details are not available, but any ham operator in the local area should have the information.

Remember, the BIGGEST RADIO SHOW of them all is scheduled for Dayton, Ohio during the weekend of April 27-28-29! Reservations should be made in advance, as this is usually a sell out for hotels and motels, however, the Dayton Hara Arena is big enough to allow for the BIGGEST dealer show and outside flea market in radio today! If you want to really see something impressive, don't miss this one. Details from ARRL, Newington, CT 06111 - phone 203-666-1541 or the Dayton Amateur Radio Club, Dayton, Ohio!

My sincere thanks to those members who sent in the material used in this months article! Without their support, this article would not have been here. Your editor can not invent this material, so continue to support YOUR club and your editor! Best regards, Bill (FL-137).

PUBLIC SAFETY — NORTH EAST:

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows — New England states, New York, Pennsylvania, New Jersey, Maryland, Delaware, and District of Columbia:

Richard Barnett, P.O. Box 428, Newton Highlands, MA 02161.

From Frank (NV-011) New Haven, Connecticut, Police Codes

1. Ambulance wanted (emer. or non-emer.)
2. Stolen auto
3. Supervisor requested
4. Policeman needs assistance
5. Burglar on premises
6. Use caution
7. Homicide
8. Suspicious person
9. Evading responsibility
10. Auto recovered
11. Car ____ go to
12. Suspicious auto
13. Out of service (give reason)
14. Returned to service
15. Operator under influence
16. Drunk
17. See complainant
18. Meet/pick up policeman
19. Robbery
20. Fight/disturbance in progress
21. Hurry with safety (red light & siren)
22. Auto accident
23. Request permission to leave radio contact
24. Fire
25. Alarm ringing (audible/silent)
26. Children involved
27. Pick up for investigation
28. In close pursuit
29. Prisoner conveyance wanted
30. Adhere to schedule
31. Do not call dispatcher
32. Dispatcher returned
33. Give location
34. Escort (state nature)
35. Contact by phone
36. Traffic signal out of order
37. Domestic
38. Garage for service
39. Traffic assignment
40. Tow truck wanted
41. Use red light only.
42. Large gathering
43. Large gathering (hostile)
44. Checking building
45. Serving subpoena or notification
46. Out of service (lunch)
47. Out of service (personal)
48. Aggravated assault (weapon)
49. Report of person shot
50. Broken window(s) or windows being broken
51. Detective requested
52. Investigator requested
53. Sudden death
54. Fare evasion (bus, cab, etc.)
55. Fireworks
56. Parking violation
57. Attempt to locate
58. Animal struck by motor vehicle
59. License check requested
60. Sniping
61. Objects. . . .being thrown at
62. Person located
63. Observe subject/vehicle--submit report
64. Stop subject/vehicle--check I.D.--submit report
65. Accident other than motor vehicle
66. Emergency equipment wanted
67. Fire emergency equipment wanted
68. Dangerous condition exists
69. Roving gang in vicinity of .....
70. Cordon plan to be executed
71. Loitering
72. Request for transportation
73. Escaped prisoner(s)
74. Recording report at _____
75. Carrying/possession of weapon
76. Missing person
77. Dispatched cars only respond
78. Resume/resuming normal patrol
79. Breaking & entering investigation (house/commer.)
80. Theft complaint
81. Shoplifting complaint
82. Theft from person complaint
83. Purse snatch
84. Auto registration listing requested
85. Person threatened
86. Bomb threat
87. Damage to property
88. Animal complaint
89. Dog bite
90. Sick/injured person--check for signal 1
91. Assume patrol area of car ____
92. Tampering with a motor vehicle
93. Loud party/excessive noise
94. Unwanted person
95. Harrassing/threatening/obscene phone calls
96. Gambling
97. Glue sniffing
98. Drug complaint
99. PRIORITY CALL (all radio transmissions cease until told to resume)
100. Lost/found property
101. Meet traffic assistant or crossing guard
102. Engine trouble
103. Flat tire
104. Garage closed for ___ hrs./night
105. Garage open
106. Maintain radio communication at all times

NEW HAVEN, CONNECTICUT, POLICE CODES (Cont'd.)

107. Stand by for location check.
108. Out of service for radio repair
109. Report of gunshot
110. Use code/cease unnecessary conversation
111. All personnel remain on present assignment until notified
112. Squad "A" personnel (same as above)
113. Squad "B" personnel (same as above)
114. Squad "C" personnel (same as above)
115. Squad "A" personnel return to assigned division
116. Squad "B" personnel (same as above)
117. Squad "C" personnel (same as above)
118. All personnel on special assignment return to assigned division.
119. All personnel with day off coming up return to assigned division.
120. Edward sector cars to assigned assembly area
121. Nora sector cars (same as above)
122. Sam sector cars (same as above)
123. William sector cars (same as above)
124. All cars report to assigned call box for instructions
125. Riot equipment to be issued but not worn
126. Riot equipment to be issued and worn
127. Tear gas to be issued (for use only on order of inspector or above)
128. All riot equipment to be returned to armory.
129. Disturbance in progress - Hillhouse High School
130. Disturbance in progress - Lee High School
131. Disturbance in progress - Wilbur Cross High School
132. Car/unit ____ operate on Freq. 1
133. Car/unit ____ operate on Freq. 2
134. Car/unit ____ operate on Freq. 3
135. Motor vehicle violation/investigation
136. Administrative errand
137. Disable repeater on Freq. ____
138. Repeater operating on Freq. ____
139. Green lights on
140. Green lights off
141. Portable good
142. Portable poor

* *

All information taken from an official code sheet dated 9/1/78. I was able to verify the code is still in use by checking with a local broadcast news dept.; however, they were not able to describe squads A, B, C, or the areas within Nora, Edward, Sam, or William sectors. The N.H.P.D. would not supply the info. when I called them on the phone. Can anyone out there help out?

NEW HAVEN FREQUENCIES

p 460.100 KRF 539 (car to car)
p 460.150 WRV 715 (Freq. 1) info.
p 460.450 KRF 539 (Freq. 2) dispatch
p 460.500 KRF 539 (Freq. 3) dispatch

All of the above freqs. are RP's.

NEW YORK
From Steve L.:
New York Emergency Medical Service

3 = Boro; 1 = Area; A = Unit.

Boro - 1 Manhattan 4 Queens
2 Bronx 5 Richmond
3 Brooklyn 6 Maspeth

Areas - Manhattan doesn't work with areas.
11 - Downtown
12 - Midtown
13 - Uptown

Bronx	Area	Precincts Covered	Units = A-S = BLS
	B1(ex21A)	40 41 42	T = BLS Triage
	2	44 46 48	U = ALS Triage

Public Safety - North East continued

	3	43	45			V-Z = ALS
	4	47				
	5	50	52			6 O A = tactical
Brooklyn	K1 (31A)	60	61	62	63	
	2	66	68	70	72	
	3	67	71			
	4	69	73	75		
	5	77	79			
	6	76	78	84	88	
	7	81	83	90	94	
Queens	Q1 (41A)	100	101			
	2	103	105	113		
	3	102	106			
	4	104				
	5	107				
	6	108	110	112	114	115-(new)
	7	109	111			
Richmond	S1 (51A)	120				
	S2	122				
	S3	123				

Manhattan

Beekman(V)	Bellevue(EMS)		Harlem(E)	Lenox Hill(V)	Metropolitan(E)	St. Luke's(V)/
11A	12A	10A	13H	12Q	13A	Roosevelt
C	B	B	I	Z	B	12K
V	C	C	J		C	M
	D		K		D	Y
	X		L		E	
	Y		M		F	
			X		G	
			Y		W	

St. Clare's(V)	St. Vincent(V)	Gouverneur(E)	Cabrini/Columbus(V)	Ambulance Hosp. =
12J	11K	11E	11W	E=EMS City
W	L	F	Y	V=Voluntary
	X	G		E=EMS Amb. 11/83
		D		V=Voluntary Amb.
		T		

BRONX

Lincoln(E)		Misericordia(V)	Webster Outpost (E)		Jacob (E)	
13R	21D	24A	13P	21A	20A	22E
Z	E		Q	B	B	23A
	F			22A	C	B
	W			B	D	C
				C		D
				W		E
						W
						24B
						W
				Outpost 50 Pct		(25A
						(B
						(W

RICHMOND

Richmond(V)	St. Vincent's (V)	Staten Island (V)	Seaview Outpt (E)	
Memorial	51G	51E	50A	51A
52W				W
53A				52A
				B

(E)MS Ambulance (V) Voluntary

BROOKLYN

Corey Isl(E)	Cumberland Outpost(E)	KingsCity(E)	Liberty Outpost(E)	Woodhull(E)
31A 32C	35C 36A	30A 33A 33B	34D	40A 37A
B D	D C	B 34A C	E	B D
C	E H	C 33W	I	E
D	F I	D 34W	W	35W F
E	J	E 36W	35G	W
F		32A Maimonides		
X		B Maimonides		
W				

Victory Outpost (E)	Long Isl.College(V)	Lutheran (V)	St. Mary's (V)
32X	36F	32E	35A
	G	F	B
	X	W	H

Booth Memorial (V)	Elmhurst (E)	Flushing (V)	Jamaica (V)	Mary Immaculate (V)
47W	44B 46C	47A	43G	42E 42W
	46A H		X	F Z
	B W		W	G
	W			

Queens (E)	St. John's Qns (V)	Rockaway Outpost (E)
42A 43A	44A	41A
B B	C	B
C 45W		C
X 47B		W

New York City Transit Police

District	Precincts Covered
1	14 17 18 19
3	50 20 22 24 26 28 30 32 34
4	1 5 6 7 9 10 13
12	41 43 45 47 48
11	23 25 40 42 44 46 52
20	103 107 108 109 110 111 112 114 115
23	100 101 105 106 113
30	76 79 84 88 90 94
32	63 67 71 72 77 78
34	60 61 62 66 68 70 SI
33	69 73 75 81 83 104 102

Radio codes same as NYPD except:

10-3 Call DISP vid landline
10-7 State/verify location
10-54 Aided case
10-55 Request ambulance
10-61 District assignment (not available)
10-62 Off the air
10-86 Non-member in RMP

Emergency Service

District	Precincts Covered
Adam	
Boy	
Charlie 1	1 5 6 7 9 10 13 MS MN 17
2	19 20 CPk 23 24 25 26 28 30 32 34
3	Bronx
5	Staten Island
6	60 61 62 63 66 67 68 69 70 72
8	71 73 75 76 77 78 79 81 83 84 88 90 94
9	100 101 102 103 104 105 106 107 113
10	108 109 110 111 112 114 115

Hwy 1 covers Manhattan and Bronx
Hwy 2 covers Brooklyn
Hwy 3 covers Queens

We would like to thank the person who sent in the following unsigned information. If whoever wrote this would like to identify himself, we would enjoy hearing from him.

N.Y. State Metro Area Frequencies, N.Y.S. Dept. of Environmental Conservation Police

Freq.	Call	Transmitter Loc.	Region	Covers
159.225	KLO 68	Stonybrook, L.I.	1	Nassau, Suffolk
159.225	KNEC 580	White Plains	3	Sullivan, Ulster, Dutchess, Putnam, Westchester, Rockland
159.225	KJU 941	New Paltz	UNK	UNK
159.225	KFC 46	Middletown	UNK	UNK

Mobiles ID as 3-digit number, prefixed by Region number, i.e., 125, 164, 215, 218, 320, 325, etc.Region 2 (NYC) mobiles operate thru either Stonybrook or White Plains repeater. Mobiles also operate on output of repeater for simplex. The DEC Police may also operate on Marine Ch. 17 156.850 (state control) as they have several watercraft. Transmissions heard this summer included references to the marine radio being installed on the new boat.

NYS Park Police

Freq.	Call	Transmitter Location
159.420	WRU 926	Babylon, Long Island

This agency is responsible for law-enforcement on all state park property on Long Island. This includes Jones Beach State Park, Robert Moses State Park, Captree State Park, Hecksher State Park, and Sunken Meadow State Park. Officers ID with shield numbers. Vehicle numbers from 1100 - 1300.

Nassau County Police Dept.

Freq.	Use	Transmitter Location	Channels
153.740	Aero Marine	Maneola	F-8 (UHF)

Extensive use by marine units, and by aero units during search/rescue on bay and ocean adjacent to Fire Island.

478.7375 Tactical Multiple Repeaters F-10 (UHF)

Used by any division for tactical communications. Nassau County helicopters show up most often on this channel. At least one helo has a Wulfsberg synthesized radio; reference was made to the "Wulfsberg being down." During the summer, helicopter 7 came up on Suffolk County PD Chan. G, 155.685, during a vehicle chase which started in Suffolk and ended in Nassau.

Suffolk County Police Dept. is considering adding another channel to its porta-comms. The new "D" channel will probably be 155.370, as that is the unofficial statewide mutual aide channel. It would give SCPD the ability to communicate directly to many of the town police departments in Suffolk.

From Gary (PA-181):

The following is a list of the more active frequencies used in my county (Lycoming County, Pennsylvania). If any RCMA reader is passing through, or travels to see the Little League world series baseball games, they may also want to listen to our "local action."

State Police at Montoursville (Troop F) covers our county, and the entire troop covers an area larger than the state of Connecticut. Base 155.580 Mob 155.790-(our troop only) Statewide mutual ch. (both base/mob) - 155.755; statewide mutual ch. (base only) - 42.600. We have 2 locally based aircraft. (PSP) Helo-4 and Air-2 (fixed wing) operates on all PSP channels, and also on 122.850. Lyc. Co. operates a helo (life flight) on county fire/amb./med. channels. State Police "F" Scuba 155.265/155.340.

*I can supply all PSP troop areas and freqs., plus 10-code.

Police - City of Williamsport - 156.450
Police - County
We have 5 freq. Three are local and mutual, #4 is local and is dept. (private) choice, #5 is national - mutual.

#1	155.310	#4	155.640/155.565/155.805, etc. (each dept. is different)
#2	155.490	#5	155.475 (national)
#3	156.030		

Civil Defense
County - 154.980 City - 155.220

I can supply all state police troop areas/freqs./10-codes, etc., if you are interested.

PUBLIC SAFETY — SOUTH CENTRAL:

Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows — Alabama, Arkansas, Louisiana, Mississippi, Tennessee, Oklahoma, and Texas:

Ken Pehl, 108 E. Centre St., Fredericksburg, Texas 78624.

Hello and say hello to March 1984! It is exciting to see 1984 finally arriving (I'm writing this on New Year's weekend). I have had some interesting support to this column this past year and I hope that it continues for the year to come. This yearly hope-for-the-future message is a bit late, but then it always takes me a while to get into the spirit of things.

This might be a great time to reannouncement an old policy. In reading the December issue, I saw our Southeast Public Safety editor, who is doing his usual fantastic job as editor, reiterate a very sensible policy (Dec. 83, page 48). I will, from this point on, adhere a bit closer to this policy and only give credit to contributors by first name and membership number, unless the contributor specifically asks for either full name and address to be published or requests anonymity, which will be so honored. Also, a contributing member's address will not be released, except with their permission, to another. Due to this policy, it is important for you, when contributing some input, to include your membership number, as I file by membership number, and to avoid confusion between similar common first names.

And I wish to also remind our readers of the forthcoming Texas RCMA State Convention sometime this year--probably this summer. Date and location are still being decided upon at this time but make your plans now to attend. Contact Gary Fitts, TX-94, 104 West 4th St., Rusk, TX 75785 for further details. An announcement will be forthcoming in this column and in the meetings column as to specific date and time, once decided.

Now on to this month's contributions---

From BRAD, OH-138: From Brad comes some rather startling news... The Tarrant County Sheriff Dept. dispatching is on low band yet, rather than high band. This runs contrary to the normal standard in the remainder of Texas, for the county S.O.'s.

TARRANT COUNTY SHERIFF DEPT. RADIO CH's

37.240	B/M	TCSO primary dispatch
37.120	B/M	NCIC/TCIC/computer info checks
37.420	B/M	undetermined use/activity heard
155.625	B/M	TCSO--Jail operations
158.730	B/M	undetermined use

So far no other low band channels are heard active.
(Editor's note: This is the first major exception to the general rule of thumb that all Texas county S.O.'s use the VHF-high band for their dispatching (primary) that has come to our attention.)

--other misc. Ft Worth area listings:

City of Ft Worth	453.900 R	Traffic Signal repair dept.
City of Ft Worth	159.165 R	(156.180 input?) -- Street Dept.
City of Ft Worth	451.050 R	-- utility/water dept.
Euless, city of	158.265 B/M	-- Euless Community Water Service

--additions to the Dallas listings in the August 1983 column:

Dallas County	150.995 B/M	WXY 488 -- Road dept. (county)
Dallas I.S.D.	464.100 R	WBJ 864/WBW 360 -- School Security
" "	484.2375 R	KYR 965 -- School maintenance
Dallas, city	464.175 R	WSD 71/WBN 592 -- Physicians Professional Amb. Svc.

--Also in the column forthcoming is an update to the January 84 column report on Ft Worth PD channels and unit numbers. So stay tune to this future update.

We certainly welcome Brad as an active and attentive contributor to our news column. I know you will enjoy hearing more of Brad's reports in the future as he nails down more details.

From RICHARD, TX-43: Rich sends in some tidbits of this, that, and the other... --Rich advises a lot of Austin suburban fire departments are getting licensed for the old Austin FD VHF-high band channels, among other additional high band frequencies. Rich believes it might just be possible the suburban depts. have acquired the Austin FD's VHF radio surplus gear.

--Update on the Austin EMS station roster (see Mar. 82 issue): Medic 10-no info
Medic 11 -- Location unknown/possibly a spare or stand by unit/ a lot of

references are made to this unit but it's not included on daily radio roll call.

Medic 12 -- possibly stationed at Fire Station 22/5309 Riverside Dr.

Medic 13 -- same comments as given for Medic 11

all 30's series units on the EMS Ch. are supervisors.

--the city of Austin/Main Library security units apparently use 467.850 B/M simplex. There is very limited range (2 Watts or less) and most are hand helds.

--a lot of new 453.xxx licenses showing up in the microfiche files for the City of Austin and for the State of Texas (Austin locations). Rich will keep us posted as further info developes on these licensed frequencies.

--the Frank Erwin Center (a Univ. of Texas entertainment facility) security and maintenance share two repeater frequencies--

453.950 R WZJ 305 primary (Morse code ID'er)

453.650 R KMA 522 secondary & overflow

From PHIL, TX-97: Phil has been in contact with us on numerous occasions lately and relates the following bits of news:

--an update to the Jan. 84 column's mention of Dallas DPS Ch 8--155.445 and its callsign: according to Phil's microfiche, the proper callsign should be KNFZ 484, location given is Hurst, Tex (Tarrant County). Phil has noted that the dispatchers ID on 155.460 with both callsigns--KKA 603 & KNFZ 484, tending to slur them together, causing confusion on the exact callsign. (Ed. note: I would assume that Dallas DPS remote controls this transmitter by microwave from the Dallas office and that this will become the Ft Worth office's transmitter once the Ft Worth DPS office becomes a reality. We will have to wait and see.)

--a correction to the Dec. 83 column: On the Jasper and Newton County Radio Systems, all is correct except that the channel positions are reversed. The info given next to ch 1 in the Dec. column is actually ch 2 and vice versa for ch 2 in the column. (Ed. note: Thanks for pointing out this error, Phil. I always need to be kept on my toes.)

From an anonymous source in Southeast Texas: The DPS hand held units in the Houston region are equipped and channeled as follows: Ch 1--5 = standard DPS ch's; Ch 6 = local S.O. primary ch.; Ch 7 = 159.150 simplex (metro ch); Ch 8 = 156.210 simplex (metro ch) secondary dispatch. Also, the Houston DPS office uses 154.695 as the office to the Alvin remote base access frequency.

From MARVIN, TX-2: Marvin checks in once more to update further his Dec 83 column report on Hardin County and the Apr 83 Jefferson and Orange Counties radio systems reports.

--Hardin County: The Lumberton Vol.FD now has a repeater active on 460.600. This repeater is simulcast on 46.360. The VFD is dispatched by the Hardin Co. S.O. dispatcher, using the UHF as the link. The mobiles talk through the UHF rptr. The low band channel, however, is the main working channel, according to their VFD Chief. In Marv's own words, "This is more baffling than the Bermuda Triangle! Why is a repeater needed?" (Ed. note: It might be some kind of phase-in plan to convert totally to UHF.)

--the Kountze FD is still using 37.180 for their dispatching and fireground ch., despite being licensed for 154.445 for some time. (ed. note: Could it be they are using the high band frequency for paging dispatch? --a common situation here in central Texas.)

--some Tyler Co. S.O. units are equipped for the Hardin Co. S.O. Ch 1. (Editor's note: There is little doubt that these are some synthesized radios making their appearance in Tyler Co. S.O.'s vehicles, just as they are proliferating all over the state of Texas in great number. Many members report adjacent county units popping up on their neighbor's S.O. repeater and elsewhere (sometimes on unlicensed frequencies). So the life of a monitorist--a die hard at that--goes.)

--Jefferson County: The Port Neches FD has a "command post" vehicle that is brought out for any type of major operation and which is equipped for just about any type frequency (Ed. note: no doubt another synthesized set) for needed coordination. The known capabilities are:

Ch 1 154.250 Central Dispatch ch.

Ch 2 154.280 Sabine-Neches Chief's Assoc. ch/mutual aid

Ch 3 154.340 Area Industries Mutual Aid ch.

Ch 4 154.130 Fire Tactical ch./informal car to car (old Central Disp. ch.)

also 155.340 HAHERN Net

154.950/155.370 Law Enforcement Inter-city

157.075 Coast Guard liason

156.800 Marine Ch 16 (calling ch.)

???.??? some unknown mobile telephone channels

460.xxx UHF police ch's 1--4 (Jefferson Co.)

--Beaumont EMS are now using UHF MED 7 (463.150) for phone patch to dial up the hospital while at the scene. This may be an RTSS set up. They still use 155.340 for communications to the hospital while enroute.

--Orange County: Add to the Apr 83 column report for Orange Co. radio systems another dispatching ch. For the big City of Pinehurst, Tex (pop. 2000) the dispatching ch (ch 4) is 460.325. Ch 1--3 are the same as other Orange Co. agencies.

Thank you, **all** , for the updates. I'm sure everyone enjoyed having them as much as I did. Keep up the good work.

From DAVID, LA-31: David sends some update news on the Acadian Ambulance Service, which services the Bogalusa, LA area. The ambulances are equipped for the following:

155.295 B/M Acadian Amb. Svc. Office/dispatching
155.340 B/M Hosp/Amb. net (enroute communications)
154.860 B/M Bogalusa PD/Ch 3 -- for Amb/PD coordination

The Ambulance Service codes are as follows: (refer to the master 10-code list listed elsewhere...only the differences are being listed here.)

Acadian Ambulance Service 10-codes

10-5	Transfer patient on board	10-37	Identify yourself
10-10	Out of unit--subject to call by phone	10-49	Pick-up patient at ____
		10-50	Negative
10-12	Visitors present	10-56	Traffic Congestion
10-15	Emergency patient on board	10-64	Resume normal traffic
10-18	Complete assignment ASAP	10-97	Arrived at scene
10-23	Standby until channel clears	10-98	Completed last assignment
10-34	Request additional ambulance	10-99	Call coroner
10-35	Give charge		

Note: 10-3, 10-13, 10-24--10-30, 10-41--10-43, 10-51/10-52, 10-57--10-99--not used.

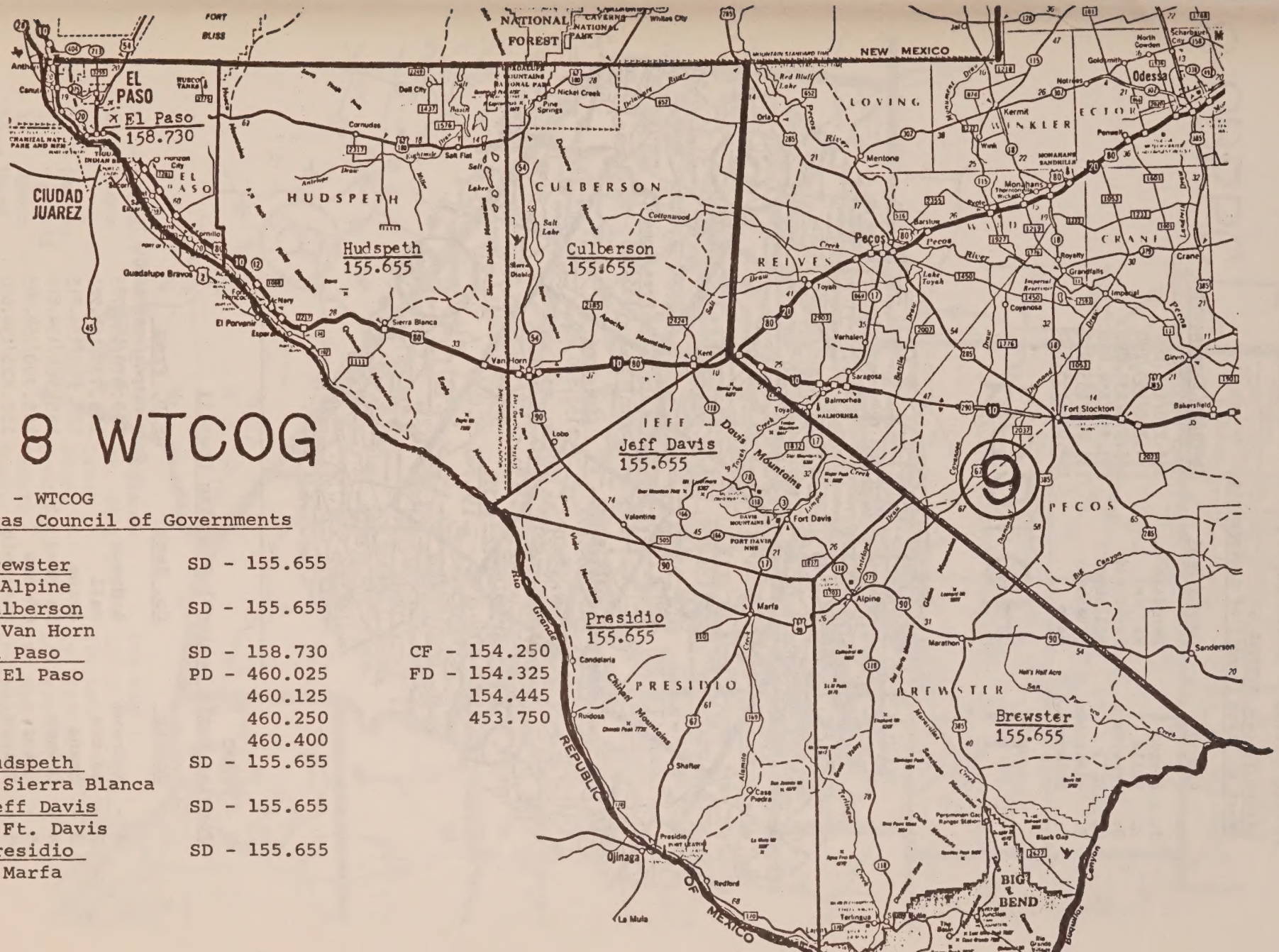
Acadian Ambulance Service Signal codes

SIGNALS

1	Cardiac	26	Patient trapped or pinned
2	Breathing	27	Amputation
3	Head, neck, or spine	28	Electrical shock
4	Poison	29	Internal injuries
5	Large blood loss	30	Train wreck
6	Fracture	31	Drunk
7	Patient doing well	32	Drunk driver
8	Domestic accident	33	Plane crash
9	Industrial accident	34	Contagious disease
10	Dead on arrival	35	Fall
11	C.V.A. (Cerebrovascular Accident--Stroke)	36	Shock
		37	Laceration
12	O.D. (Overdose)	44	Stabbing
13	General illness	45	Shooting
14	O.B. (Pregnancy)	49	Mental Patient
15	Seizure	51	Fire, Burn
16	Abdominal	52	Auto accident
17	Drowning	53	Attempted suicide
18	Undetermined Emergency--advise office	Signal I - Information concerning ticket	
		Signal S - Stand-by	
19	Diabetic	Signal P - Prank	
20	Explosion	Signal H - Hazardous Situation, use caution	
21	Assault, Beating	Code 1 - Immediate transfer	
22	Unruly patient	Code 2 - Emergency (lights & siren)	
23	Dizziness, Fainting, Weakness		
24	Fever		
25	Unconscious		

Thank you, David, for this list of codes and frequencies. We sure do appreciate the input from the Bayou State. Continue to write.

And now to round out this month's column, as has become customary, we ran off a few more of Dave's, TX-32, travel maps for the county Sheriff Dept. dispatching channels subdivided by planning region. See ya'll next month.



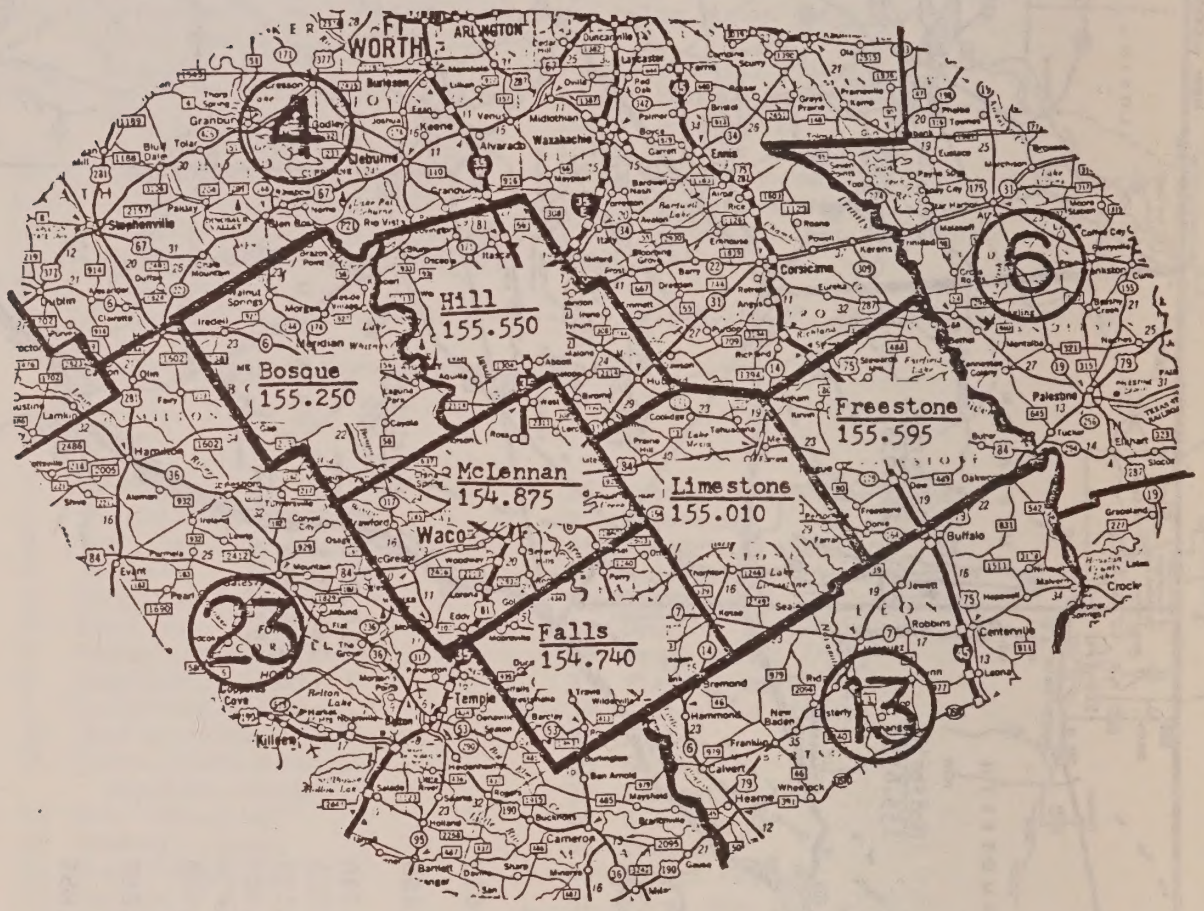
Region 8 - WTCOG
West Texas Council of Governments

1 -	Brewster Alpine	SD - 155.655		
2 -	Culberson Van Horn	SD - 155.655		
3 -	El Paso El Paso	SD - 158.730 PD - 460.025 460.125 460.250 460.400	CF - 154.250 FD - 154.325 154.445 453.750	
4 -	Hudspeth Sierra Blanca	SD - 155.655		
5 -	Jeff Davis Ft. Davis	SD - 155.655		
6 -	Presidio Marfa	SD - 155.655		

Region 11 -- HOTCOG
Heart of Texas Council of Governments

	County	County Seat	Sheriff: Base/mobile Rptr output/ rptr input
1.	Bosque	Meridian	155.250/156.030
2.	Falls	Marlin	154.740/155.790
3.	Freestone	Fairfield	155.595/155.070
4.	Hill	Hillsboro	155.550/154.830
5.	Limestone	Groesbeck	155.010/155.910
6.	McLennan	Waco	154.875/155.850

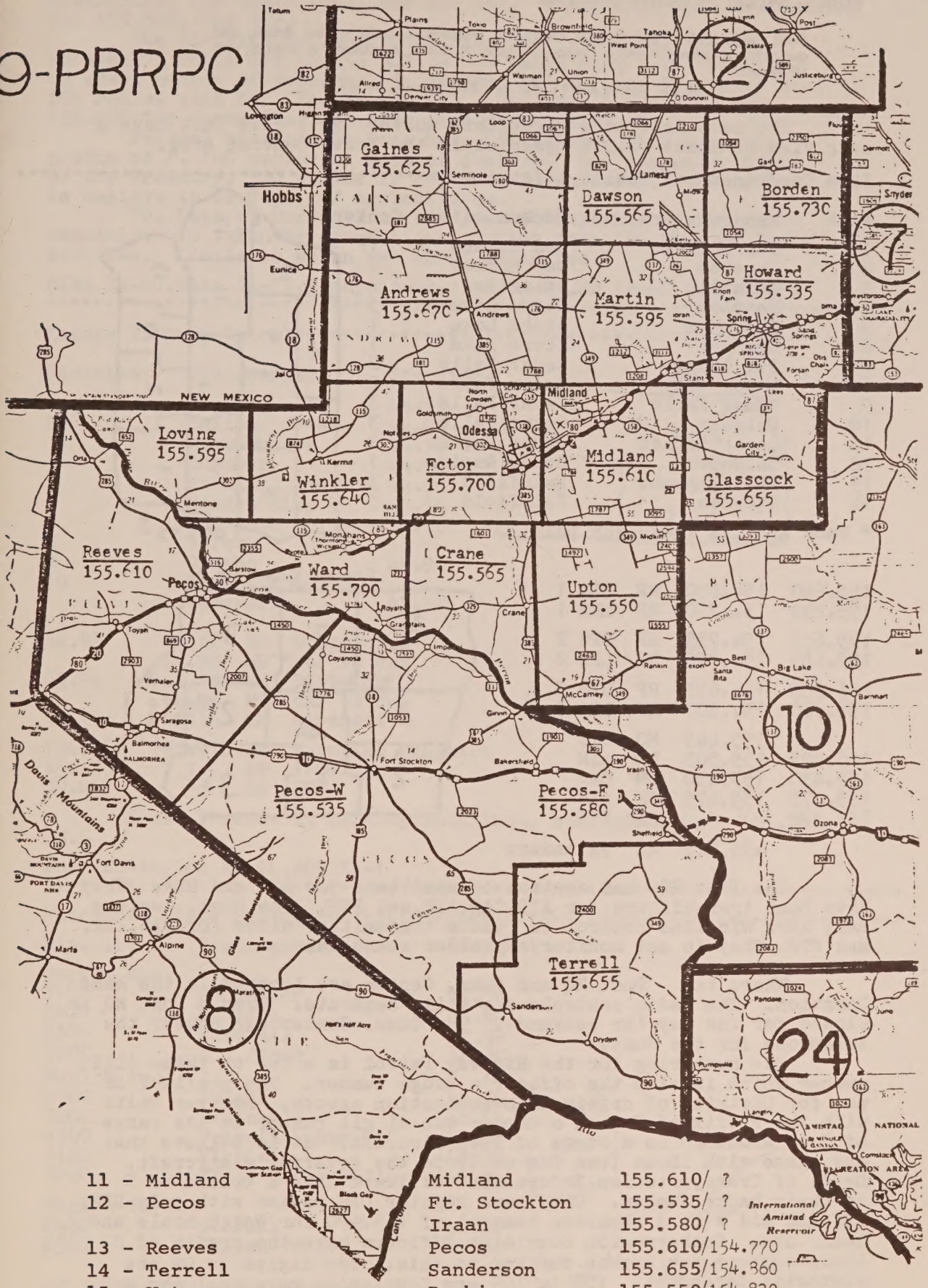
11 HOTCOG



---

9 - PBRPC
Permian Basin Regional Planning Council

	County	Co. Seat	S.D. Freq Rptr output/rptr input
1 -	Andrews	Andrews	155.670/154.785
2 -	Borden	Gail	155.730/154.725
3 -	Crane	Crane	155.565/154.815
4 -	Dawson	La Mesa	155.565/154.815
5 -	Ecter	Odessa	155.700/154.845
6 -	Gaines	Seminole	155.625/154.650
7 -	Glasscock	Garden City	155.655/154.860
8 -	Howard	Big Springs	155.535/154.755
9 -	Loving	Mentone	155.595/154.875
10 -	Martin	Stanton	155.595/154.875



11 - Midland	Midland	155.610/ ?	
12 - Pecos	Ft. Stockton	155.535/ ?	
	Iraan	155.580/ ?	
13 - Reeves	Pecos	155.610/154.770	
14 - Terrell	Sanderson	155.655/154.860	
15 - Upton	Rankin	155.550/154.830	
16 - Ward	Monahans	155.790/154.725	
17 - Winkler	Kermit	155.640/154.755	

(Editor's note: Additions, corrections, and confirmations on any of these maps are always welcomed, at any time.)

PUBLIC SAFETY — NORTH CENTRAL:

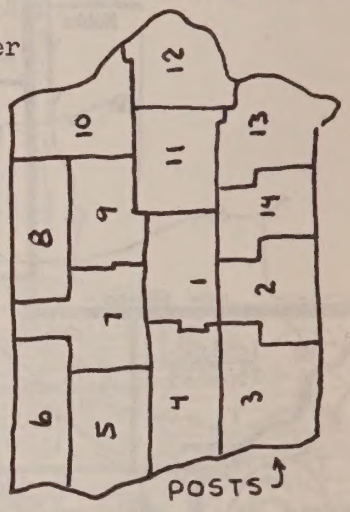
Send Public Safety and Special Emergency frequencies, radio system details, and questions as follows — Iowa, Kansas, Missouri, Nebraska, N. Dakota, S. Dakota, and Minnesota:

Michael W. Scheel, RR #1, P.O. Box 221, Walcott, IA 52773

The news is little short this month. So I will just have a over view of State Police agencies in the North Central area.

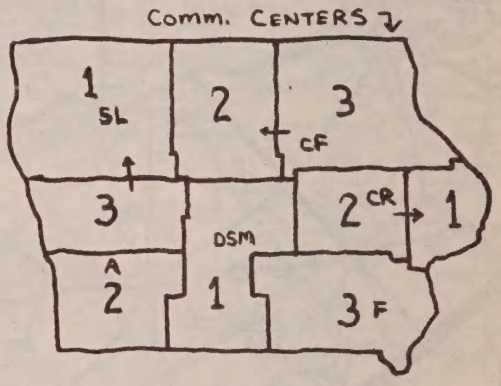
Iowa Department of Public Safety++

Post	Headquarters	Communication Center	
1	Des Moines	Des Moines	1*
2	Osceloa	Des Moines	1
3	Atlantic	Atlantic	2
4	Dension	Storm Lake	3
5	Cherokee	Storm Lake	1
6	Spencer	Storm Lake	1
7	Ft. Dodge	Cedar Falls	2
8	Mason City	Cedar Falls	2
9	Cedar Falls	Cedar Falls	3
10	Oelwein	Cedar Falls	3
11	Cedar Rapids	Cedar Rapids	2
12	Davenport	Cedar Rapids	1
13	Mt. Pleasant	Fairfield	3
14	Ottumwa	Fairfield	3



* Base and LEA frequency pair

155.640	154.650	RP	DPS 1
155.790	154.770	RP	LEA 1
155.655	154.755	RP	DPS 2
155.685	154.890	RP	LEA 2
155.565	154.655	RP	DPS 3
155.700	154.800	RP	LEA 3
	155.445	MO	CIS
155.505	155.505	BM	AIR
155.430	155.430	BM	Car
155.475	155.475	BM	AID
155.370		BA	PTP
	453.625	MR	extenders



The Post HQs has control transmitters for DPS and LEA. They have Base transmitters for AIR,CAR,AID,and PTP. The Comm. Centers only have wireline control to remote transmitter sites for DPS,LEA, and PTP. They do not monitor any other channels.

Where the Post HQ and Comm. Center are located in the same location. The radio controls are still separate. When a Post HQ is closed for the day (or weekend). The Comm. Center can answer the telephone for the Post.

The numbering for the Highway Patrol is a two or three digit number which is also the officer's badge number. The prefix I is use for Division of criminal investigation agents. However Units with the Prefix of I with a one or two di git number in the range of 2 to about 25 is a state of Iowa aircraft. It is believe that any plane with ID as Iowa One or I1 is the governor's aircraft. Dept. of Transportation Enforcement Officers have a prefix of T to their badge number. They have regular DPS radios with only DPS, LEA,and Aid with a separate channel of 155.970 for Weigh Scale and their use. Conservation Commision Officers have the prefix of C. their numbers are broken further to this. Two digits to 99 are statewide personnel. 100 to 199 are Commission personnel who are Water Patrol, Biologists,and Conservation Law Enforcement Officers. In the 200-299 range are state park personnel. Finally personnel in the 301 to 399 are Game Wardens who are assigned to a county. The number after C3 is the county that they are assigned to. Conservation also has DPS radios with DPS,LEA, and AID. They also have a channel known as CO with 155.595 BM. Water Patrol Stations have a control

transmitter for their local DPS and LEA. Their also have transmitter for 155.595, and PTP.

The Division Of Fire Protection and Investigation (Fire Marshals). Units are in the 501 to 599 range with out a prefix. an exact number of personnel is unknown,but is low. They also have DPS radios with DPS,LEA,CIS,AID,AIR. They are believe to have 154.280 for communications with fire departments.

Federal agencies in Iowa have DPS radios. They have the prefix of F. 100 series is Dept of Justice. 200 series is Dept. of the Treasury. 300 series is Dept of the Interior. 400 series is believe to be Dept. of Agriculture..

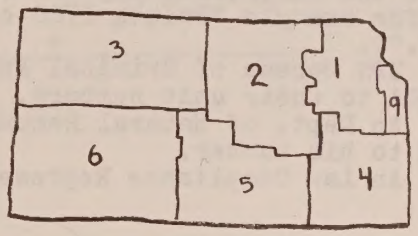
The Dept of Corrections was just established by the state assembly. To takeover correctional duties from the Dept of Social Services. Little is known yet about radio use.

Mike IA-07,Mike IA-11,Randy IA-42,John IA-23,Ed IA-45 and others

++

Kansas Highway Patrol

Division	Headquarters	Dispatch
1	Topeka	44.98
2	Salina	44.94
3	Hays/Norton	44.98
4	Chanute	44.94
5	Wichita	44.98
6	Garden City	44.94
7	Turnpike	154.680
8	Safety	
9	Olathe	44.94
10	Training & Aircraft	45.14



44.98	44.82	BM	Dispatch
	44.98	MO	car to car
44.94	45.18	BM	Dispatch
	44.94	MO	car to car
45.14	45.14	BM	aircraft
154.680	158.910	BM	Turnpike Dispatch
154.830	?	RP	repeater
39.46		BA	PTP

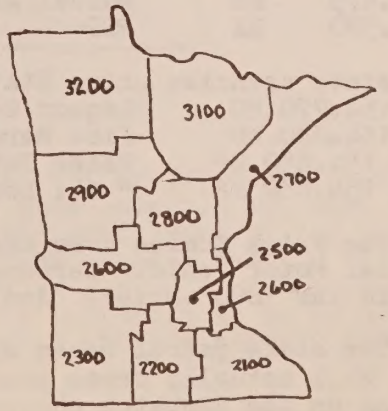
State Prisons at Lansing,Hutchison, and Topeka have 155.310 BM.

Audy KS-14,Don KS-14,BOB KS-1

++

Minnesota State Police

District	Headquarters	Dispatch
Region One		
2100	Rochester	42.54
2200	Mankato	42.64
2300	Marshall	42.92
2600	St. Cloud	42.50
Region Two		
2700	Duluth	42.54
2800	Brained	42.64
2900	Detroit Lakes	42.92
3100	Virginia	42.50
3200	Thief River Falls	42.54
Region Three		
2400	St Paul	42.64
2500	Golden Valley	42.92



42.50	42.76	BM	Dispatch
42.54	42.76	BM	Dispatch
42.64	42.72	BM	Dispatch
42.92	42.66	BM	Dispatch
42.82	42.82	BM	Statewide
42.88	42.88	BM	Aircraft & Radar

155.475 BM MINSEF

Low Band Radio*

42.54	42.76	BM	Dispatch	1
	42.54	BM	car to car	2
42.88	42.88	BM	aircraft & radar	3
42.82	42.82	BM	statewide	4

High Band Radio

ch 1 to 3 are monitor only for local 1

Ch4 155.475 BM MINSEF

* using Rochester District as an example

State Patrol units are numbered with a prefix of SP. The Captain or Commander of a District is known as the same number as his District (i.e. 2100). Each Sergeant is known by his position among the other sgts in the district (i.e. 2102). Troopers will a unit number as such. SP89,SP305 and such. Each District is divided into Patrol Stations. For Example Duluth district is 2710-Pine County,2720-Carlton County,2730-St. Louis County,2740-Lake County,2750-Cook County such stations are important. Because the dispatcher may direct a message only to a station's cars (for example "Duluth 2720 cars prepare to copy an attempt to locate.").

DPS Bureau of Criminal Apprehension agents are prefix with BCA to their unit numbers.

An Dept. of Natural Resources Conservation Officer is prefix with K to his number.

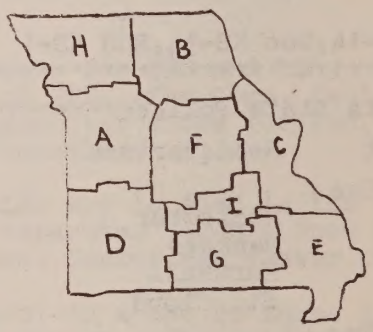
An Law Compliance Representative or LCR operates the weigh scales.

Jim MN-03

++

Missouri State Patrol++

Troop	Headquarters	Dispatch
A	Lee's Summit	42.06
Metro	Lee's Summit	42.12
B	Macon	42.06
C	Kirkwood	42.12
Metro	Kirkwood	42.06
SS	Flat River	42.12
D	Springfield	42.06
SS	Carthage	42.06
E	Poplar Bluff	42.06
SS	Sikeston	42.12
F	Jefferson City	42.12
G	Willow Springs	42.06
H	St. Joseph	42.06
I	Rolla	42.06



42.06	42.22	BM	F1	Dispatch
	42.06	MO	F2	car to car
42.12	42.32	BM	F3	Dispatch
	42.12	MO	F4	car to car
42.38		BA	--	Troop to Troop
154.905		MO		extenders
155.475		BM		Mutual Aid
155.370		BA		PTP

other state agencies using State Patrol Radio system

	154.770	MO	Liquor Control
	154.280	MO	Fire Marshalls
155.595	154.830	RP	Water Patrol
155.805	154.830	RP	" St. Louis area

The Weigh Scales uses the radio system as the mobiles. Commercial Motor Vehicle personnel is the 1100 series. The Water Patrol is the 1200 series. And the Fire Marshalls are the 1400 series.

The state patrol bases while licensed on 155.37 for point to point. Will actually cross monitor by calling on 42.06 or 42.12 depending on the dispatch channel for the Troop. Will then listen on 155.370 for the other station.

State cars can a city/county station on 42.06/42.12 and listen for a response on 155.730 which is the statewide Sheriff and local Law channel.

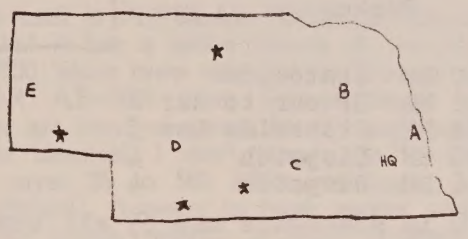
Local Stations can call on either 155.37 or 155.73 to the state. Then listem for a response on 42.06/42.12.

Mike MO-01

++

Nebraska State Patrol ++

Troop	Headquarters
A	Omaha
B	Norfolk
SS?	Ainsworth
C	Grand Island
SS?	Holdrege
D	North Platte
SS?	McCook
E	Scottsbluff
SS?	Sidney



State HQ....Lincoln

42.46	42.30	BM	Dispatch
	42.46	MO	car to car
	42.20	MO	unknown use
	42.34	MO	unknown use
155.475	155.475	BM	AID*

* Nebraska State have just received the license for NLERN. The plan for its use is still in the planning stages.

The locations listed above appear to dispatch locations for the Patrol. Point to point radio communications appear to be either direct on 39.90 which is statewide Law channel, or cross monitor between 42.46 and 39.90. Because the state is divided by the Central and Mountian Time zones in the western part, the shift changes seem to be one hour early in the western part.

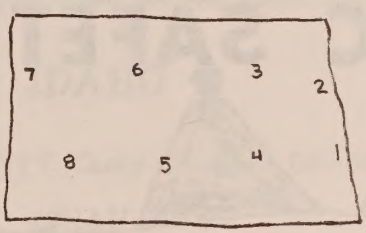
Little in known at this time about the day to day operations the patrol

Mike IA-11

++

North Dakota Highway Patrol ++

District	Headquarters
1	Fargo
2	Grand Forks
3	Devils Lake
4	Jameston
5	Bismark
6	Minot
7	Williston
8	Dickinson



154.905	?	RP	F1
154.935	?	RP	F2
155.430	155.430	BM	F3
155.505	155.505	BM	F4
155.475	155.475	BM	F5
155.370		BA	F6

This appears to used statewide for all State,County, and local Law enforcement agencies in the state. Some counties may have additional licenses, but it is unknown for what. Most of the larger cities have their own systems. Both a look through the FCC listing and Police Call Volume 5 shows the counties have a control transmitter license on 155.430 and 155.505. There is supposing to be an extender frequecny in use (453.450 is possibly it.) Little else is known.

Dan ND-01

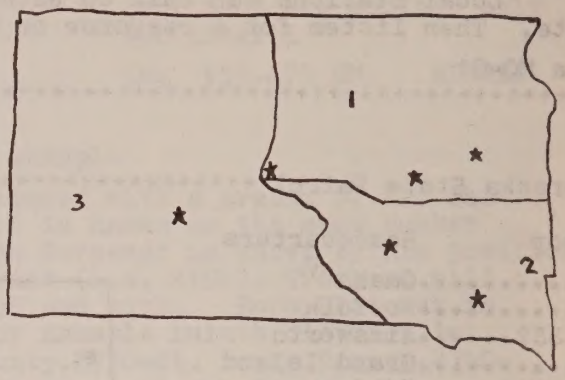
++

South Dakota Highway Patrol ++

District	Location
1	Aberdeen
2	Sioux Falls
3	Rapid City

Dispatch locations

Rapid City	Huron
Wall	Mitchell
Pierre	Sioux Falls
Aberdeen	Parker
Watertown	



39.10	39.10	BM	Statewide	1
	39.12	MO	HP car to car	2
39.32	39.32	BM	Statewide Law	3
39.24	39.16	BM	Dispatch	4
39.28	39.16	BM	Dispatch	4

39.10 is statewide use by all state,county, and local agencies. At this time there is no plans to use any highband channels for state law enforcement. Highway Patrol Officers are numbered in the 1 to 185 range. HP100 is Aberdeen District Office. HP200 is Sioux Falls District Office. HP300 is Rapid City District Office. HP400 units are the Governor security. HP500 is the State Patrol Aircraft. MC units in the 20 to 35 range are stationary or mobile weigh scales.

Parker Radio can control Micthell and Sioux Falls Transmitters are those offices close at night or weekend.

Rudy SD-03

++

Misc. Dept. ++

Well that all the information we (meaning those who have sent in anything) have on the State Law enforcement agencies in the North Central area. So if you know of information that adds to or changes what is in this column. Please send it in. While this could have been in the Communication Profile. I would have nothing here.

Bob KS-01 please send a sase. I lost your address and have some raw information on the items you requested. It is not ready yet to be printed in the column.

See you next month, same station,same channel. MWS IA-11 -30-

PUBLIC SAFETY WEST

Send Public Safety and Special Emergency frequencies, radio system details and questions for Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming to:

George N. Hoggatt, 17473 E. 16th Dr., Aurora, CO 80011

****

This time it is the March issue. I even have my editors copy of the February issue. Carol Ruth, the club's "jack of all trades" is doing a great job getting the magazine out. I don't know who helps, but we owe them a big THANKS. As column editor, I get my name at the top of the column and lots of credit, but those who do the cut and paste and haul the results to the printer and Post Office, etc. are what makes it go. And I don't know who to thank except Carol, but thanks anyway.

NEW RADIOS

Usually I learn about new radios from the magazine, but not this time. Bearcat and Regency have apparently announced new models.

Bearcats is the COMPUSCAN/2100. It is a 200 channel (10 banks of 20 channels) receiver that appears to have the same coverage as the 220 although there is some indication that it may have a little wider coverage. The bad news is that it needs a computer to run it (hence the name). It is well reviewed in COMPUTERS & ELECTRONICS January 1984. Rather than give any more detail here, I suggest that you obtain a copy and read the review.

Regency's is the MX-5000. It was advertised in POPULAR SCIENCE (January 1984). The ad was placed by Regency so I assume that it has a better chance of comming to the market than do the HX-3000 and the MX-7000 which were due out in October and are still not available. It is identical to the AOR AR-2001 from Britain shown in the February INTERNATIONAL column. The pictures are identical except for the angle and the name, even the channel number and frequency are identical. I don't know who is making it. Basicly it is a 20 channel machine that will cover 25 to 550 MHz continuous. It is 12v with a wall transformer for 110v (or 220v in Britain). Appears to have narrow and wide band FM plus AM stored with each channel. Has search, priority, a clock, programmable delay and lockout. The ad has no mention of the HX-3000 or MX-7000 so I don't know if they have been dropped or what. The local dealer says that all are expected in March now. Unfortunately the year was not specified.

COLORADO

DENVER POLICE [Joyce Madden CO-032]

As expected, some radio changes are beginning to show up one the DPD. The following were noted as of early January:

METRO - The Special Services Unit (SSU). This replaces the Victor and King (K-9) units.

TAC - The motorcycle TACtical units formerly known as ESCORT

UNION or UNCLE (for the letter "U") - Crimes Against Persons detectives. Formerly these were part of the X-ray series.

YANKEE (for the letter"Y") - Crime Lab units. Formerly these were part of the Baker series.

Joyce notes that in my list of a few months back, the John units seldom use the word "John" but usual use just the letter.

Omitted from that list were the POST units. These are foot patrol. The first number is the District.

IDAHO

CANYON COUNTY [Casey Crookham OR-054]

BASE	MOBILE	SERVICE	TYPE	CHAN	NOTES
460.325	465.325	Police	repeater	1	dispatch
460.500	465.500	Police	repeater	2	secondary channel
460.100	465.100	Police	repeater	state	State Police
none	465.275	Police	mobile	4	car to car
460.025	465.025	Police	repeater	all call	mutual aid

Possible new frequencies (not confirmed): 460.425, 460.250

INCIDENT CODES NCIC INCIDENT CODES

0200	Military	1100	Sexual Assault
0300	Immigration	1200	Robbery
0900	Homicide	1300	Assault
1000	Kidnapping	2000	Arson

2100 Extortion
2200 Burglary
2300 Larceny
2400 Stolen Vehicle
2500 Forgery
2600 Fraud
2700 Embezzlement
2800 Stolen Property
2900 Property Damage - Vandal
3500 Dangerous Drugs
3564 Marijuana
3600 Sex Offense
3700 Obscenity
3800 Family Offense
3900 Gambling
4000 Commercialized Sex Crimes

CCSO INCIDENT CODES

8001 Admin Duties
8002 Training
8003 Assist Other Department
8004 Assist Other Officer
8005 Public Assist
8006 Public Relations
8007 Court
8008 Police Vehicle
8009 Traffic Control
8010 Traffic Accident PD
8011 Traffic Accident PI
8012 Traffic Accident F
8013 Traffic Accident - Property
8014 Traffic Accident - Other
8015 Other Accident or Diaster
8016 Fire
8017 Hazardous Condition
8018 Attempted Suicide
8019 Suicide
8020 Unattended Death
8021 Jail Duties / Non assist
8022 Prisioner Transoortation
8023 Person Transportation
8024 Suspicion of a Crime
8025 Susp Person or Vehicle
8026 Abandoned Vehicle
8027 Hitchhiker
8028 Missing Person
8029 Roadblock or Stake Out
8030 Property Check OK
8031 Property Check Other
8032 Animal Complaint
8033 Loose Livestock
8034 All Other Offenses not Listed
8035 Break / Lunch, Other
8036 Package Pickup or Delivery
8037 Message Pickup or Delivery
8038 Briefing
8039 Going off Duty
8040 All Other Non-Criminal
8041 Radar
8042 Advise Civil or CID Dept.
8043 Warrant Service
8044 Recovered Property
8045 Follow up Work
8046 Lake Patrol
8047 Lake Maintenance
8048 Found Property
8049 Weekender
8050 Recovered other Dept.
8051 Vehicle Inspection

4100 Liquor Offense
4200 Drunkenness
4800 Obstruction of Police
4900 Escape
5000 Obstruction of Judiciary
5100 Bribery
5200 Weapon Offense
5300 Public Peace
5400 Traffic Offense
5500 Smuggling
6200 Conservation Laws
6300 Vagrancy
7100 Property Crimes
7200 Morals Crimes
7300 Public Order

8052 Fireworks Violation
8053 Trash / Littering Complaint
8054 Drowning
8055 Search / Rescue
8056 Park Patrol
8057 Missing Water Craft
8060 Summons
8061 Subpoena
8062 Order to Show Cause
8063 Writ - Garnishment
8064 Writ - Property Seizure
8065 Notices
8066 Tax Warrants

8058 Regatta Patrol
8059 Disabled Water Craft
8067 ATL
8068 Civil Follow-up
8069
8070
8071
8072
8073
8074
8075
9000 Hold for Other Dept.

ACTION CODES

01 Arrested
02 Cited
03 FIR Card Made
04 Warned-Released
05 Interrogated
06 Follow-up Investigation
07 Unfounded
08 Report- Initial at Station
09 Report- Follow-up at Station
10 Report- Initial other Location
11 Report- Follow-up other Location
12 Prisioner Booked
13 Prisioner assist Booking
14 Prisioner Released
15 Prisioner to Dr./Hospital
16 Transported
17 Surveilance
18 Assist CCND
19 Background Check
20 Jail Duties
21 Informant Contacts
22 Assist Radio Opperator
23 Lab and Darkroom
24 Recieved Instructions
25 Supervised Activities
26 Peace Restored

Public Safety - West continued

27 Advised to Recall Deputy
28 Removed to Hospital
29 Assistance Rendered
30 Advised to Contact Attorney
31 Eliminated Hazard
32 Check for Wanted/ Negative
33 Attached Abandoned Vehicle Sticker
34 Returned to Owner
35 Owner Notified
36 Returned to Home/ Family
37 Impounded
38 Property Inventoried
39 Court Papers Obtained
40 Court- Testified
41 Unable to Locate
42 No Such Address
43 Perpetrator GOA
44 Complaining Party GOA
45 No Action Required
46 Errand Completed
47 Errand Cancelled
48 Unable to Complete Action
49 Arrest/ Investigation by Other Dept.
50 Juvenile Detained
51 Handled by Phone
52 Referred to Other Dept.
58 Towed
59 Righted Craft
60 Located Victim/ Vehicle
61 Daysheet Entry
62 Broadcast

OREGON

MULTNOMAH COUNTY [George DuBois FCC TOPICS editor]

George confirms last month's data from Andy Ballas that 460.550 (repeater) is the new Multnomah County Justice center jail frequency. The old Rocky Butte Jail is to be torn down.

OREGON STATE Police [Kevin Slater OR-018]

New repeater in Eugene on 154.905. Mostly for hand held units although a couple of areas do have high band car radios instead of the low band ones.

Possible change in the Salem OSP 154.860 repeater, which now covers to the south and up into the mountains to the east. Any expansion of this district on this frequency would be precluded due to interference to Polk County (west of Salem) on 154.875.

PORTLAND BOWFIELD PROJECT [George DuBois FCC TOPICS editor]

Oregon Department of Transportation - 47.180 Construction Companies - 151.505, 43.06. 151.505 is for R. A. Hatch Co. a non-union outfit. Security units are S-2, S-3 and S-4.

WASHINGTON

COWLITZ COUNTY [George DuBois FCC TOPICS editor]

They are now using 154.815 (repeater) with the same input of 156.210. They had to vacate 155.370 for yet another net in washington. That would appear to make 4 nets including 155.475. The uses are unknown as all that is heard is lots of call signs every half hour.

THURSTON COUNTY SHERIFF [Ron Murray CA-VE-013]

155.550	154.800	Police	repeater	1	dispatch, Sheriff, small towns
156.150	155.070	Police	repeater	2	dispatch cities
155.010	155.010	Police	simplex	3	car to car
155.370	155.370	Police	simplex	4	L.E.R.N.

KITSAP COUNTY CENCOMM [Ron Murray CA-VE-013]

158.880	153.920	Local Govt	repeater	1	dispatch, Sheriff, small towns
158.880	158.880	Local Govt	simplex	2	car to car
155.775	153.815	Local Govt	repeater	?	City freq, Bremerton dispatch
155.895	154.980	Local Govt	repeater	?	Public Works
155.955	153.965	Local Govt	repeater	?	use unknown
156.015	156.015	Police	simplex	?	use unknown

WASHINGTON STATE PATROL [Ron Murray CA-VE-013]

New motorcycle officers prefix their personal number with "MARY". Example from the Seattle area - "MARY-857".

KING COUNTY FIRE DISTRICT 43-MAPLE VALLEY [Ron Murray CA-VE-013]

F1-154.070 F2-154.445 F3-154.310 F4-154.250
Dispatched by ValleyComm KIU904 KNCH647
800 and 810 series numbers are assigned to individual firefighters.
Paramedic 812 is a volunteer from King County Medic One
81 22225 S.E. 231st Maple Valley (HQ)
82 27524 Kent-Kangley Rd. Ravensdale
83 27251 216th S.E. PalMor area
84 16855 195th S.E. Maple Valley Heights
85 new Jan. 1, 1984 Hobart

SEATTLE POLICE DEPT. M.I.R. CODE [name withheld]

M.I.R. (Miscellaneous Incident Reporting) codes are used to clear calls. The format is to give the three digit code followed by one of the disposition letters. For example, 050-Charlie would be a residential burglary offense report with no arrest.

ANIMAL COMPLAINT
injured, dead, dangerous 260
noise, stray, dog bite 261
ALARMS, FALSE
bank alarm 211
commercial alarm 212
fire alarm 213
residential alarm 214
VARDA alarm 216
school alarm 217
other alarm 218
ARSON, BOMB, EXPLOSION (include found device) 090
ASSIGNED DUTY
reports 908
meet with supervisor (out of service) 909
station duty (clerk, mail, etc.) 910
community, school and special events 911
court 912
hospital guard 913
prisoner escort 914
other escort 915
stakeout 917
foot beat (from assigned car) 919
in-service training 920
transport evidence - equipment 921
detail by supervisor 922
Kingdome event 924
Seattle Center event 925
E.R.T./hostage negotiation
DOWN TIME
out at precinct 930
eat 931
coffee 932
garage (gas, maintenance, wash, etc) 933
out of car, no reason given 934
out at range 940
out of service 950
ASSAULT 040
harassment/threats (include bomb threat) 041
by telephone/writing 042
domestic assault/threats 043
ASSIST OTHER AGENCY (use this category when assisting agencies - i.e. wire down, transit escort, robbery in county, etc.)
federal agency 311
state agency 312
county agency 313
city agency 314
ASSIST PUBLIC - OTHER NON-SPECIFIED 390
AUTOMOBILES
auto theft 071
auto theft & recovery 072
recovery (theft) 073

- license plate(s), theft or loss 074
- request to locate 320
- abandoned auto hulk (private property) 391
- abandoned car 410

BURGLARY 050
- residential 050
- non-residential 052

CASUALTY (non-traffic, non-criminal, include man down, injured and sick persons, dead body) 330

CHILD (abandoned, abused or neglected) 150

DISTURBANCE
- family (include standby to maintain peace) 241
- fight 242
- juvenile 243
- noise 244
- other 245

DRUNKENNESS AND LIQUOR VIOLATIONS
- down, injured 172
- minors 174
- adults 176

FRAUD (include bad checks, bunco, forgery) 100

HARBOR (WATER)
- debris, navigational hazards 341
- water emergencies 342

HAZARDS 350

HELP THE OFFICER (EMERGENCY) 510

HOMICIDE 010

KIDNAP 110
- custodial interference 111

MENTAL COMPLAINT 220
- p/u or transport 221

MISC. MISDEMEANORS & VIOLATIONS 170 (reckless endangerment, minor consuming, litter, etc.)

MISCHIEF OR NUISANCE 250

PERSON (lost, found, missing)
- found person 361
- lost person 362
- missing person 363
- runaway 364
- A.W.O.L. 365

PREMISE CHECKS
- request to watch 271
- open door 272
- license inspections 273
- business check 274
- crime prevention 275

PROPERTY DAMAGE 130

PROPERTY (found, missing)
- missing property 371
- found property 372

PROWLER (trespass) 160

RAPE 020

SEX OFFENSES
- rape 020
- lewd conduct 141
- molesting 142

SUSPICIOUS CIRCUMSTANCES 280
- person/prowler 280
- vehicle 281
- building (open door, etc.)

THEFT (larceny)
- auto acc. 061
- car prowl 063
- shoplift 064
- all other 065

TRAFFIC
- blocking traffic 415
- accident investigation 430
- assist motorist 440
- DWI 450
- moving violation 460

Public Safety - West continued
pedestrian violation 465
parking violation (except abandoned car) 470
traffic control 480
traffic control - special events 481
refuse to stop (chase) 482
VICE
gambling 121
liquor (business establishment) 122
narcotics 123
pornography 124
prostitution 125
other 126
WARRANT SERVICES
felony 191
misdemeanor 192
WEAPON, person with
gun 291
other weapon 292
****

DISPOSITION incident number needed
A. PHYSICAL ARREST MADE - use the Offense and Arrest Report, or the Traffic Incident Report.
B. CITATION - criminal citation issued
C. NO ARREST MADE - Offense Report, Vehicle Report, Incident Report or False Alarm Report written.
D. EVIDENCE SUBMITTED

DISPOSITION incident number not needed
H. FOLLOW-UP REPORT MADE (use the previously issued incident number)
I. CITATION - non-criminal citation issued (use "D" when evidence is submitted)
J. F.I.R. WRITTEN
K. OTHER REPORT MADE (i.e. Hulk Authorization, etc.)

OTHER DISPOSITIONS
M. false complaint/unfounded
N. non-criminal referral
O. oral warning given
P. incident located/public order restored
Q. unable to locate incident or complainant
R. no police action possible/necessary
S. no such address or location
T. transportation or escort provided
U. assistance rendered
V. cancelled by radio
X. extra unit

GRAYS HARBOR COUNTY [Curt Wastradowski WA-043]

SHERIFF: 1-**-** units

F-1 155.910 (repeater out), 158.910 (repeater in)
F-2 155.370 LERN (Law Enforcement Radio Network)

CITY OF ABERDEEN: 2-**-** units
POLICE
F-1 155.730 Patrol & dispatch (simplex)
F-2 155.730 LERN (rarely used at present)

FIRE (Station 72)
F-1 154.190 Dispatch & fireground
F-2 155.730 Communications with P.D.
F-3 158.940 Communications with City Public Works
F-4 155.340 HEARS, communications with hospitals

CITY OF HOQUIAM 3-**-** units
POLICE
F-1 155.430 Dispatch and operations
F-2 155.730 Communications with Aberdeen
F-3 155.370 LERN
F-4 155.940 Talk around & shared with Public Works before 5:00 p.m.

FIRE (Station 73)
F-1 154.190 Dispatch & Fireground

Public Safety - West continued

CITY OF OCEAN SHORES 4-**-** units
POLICE
F-1 154.085 Dispatch & operations
F-2 155.910 Communications with sheriff
F-3 155.370 LERN

FIRE (Station 74)
F-1 154.190 Dispatch and Operations

CITY OF WESTPORT 5-**-** units
POLICE
F-1 155.010 Dispatch and operations

FIRE
F-1 153.860 Dispatch and Operations (Westport dispatches for North Cove Fire Dept. in Pacific County)

CITY OF COSMOPOLIS 6-**-** units
POLICE
F-1 155.910 County sheriff dispatches this agency

FIRE (Station 76)
F-1 154.190 Dispatched by Station 72, Aberdeen

CITY OF MONTESANO 7-**-** units
POLICE
F-1 155.790 Dispatch and operations
F-2 155.370 LERN
F-3 155.910 County sheriff radio

FIRE
F-1 154.385 Dispatch and operations

CITY OF ELMA 8-**-** units
POLICE & FIRE
F-1 155.085 Dispatch and operations

CITY OF McCLEARY 9-**-** units
POLICE
F-1 154.100 Dispatch and operations

FIRE
F-1 154.190 Dispatch and operations

QUINAULT INDIAN NATION 10-**-** units
TRIBAL POLICE
F-1 155.595 Repeater out, 159.150 input
F-2 155.910 County sheriff radio

Note: Several North Beach area deputies have the ability to communicate directly with the tribal police on 155.595.

CITY OF OAKVILLE 11-**-** units
POLICE
F-1 155.910 County sheriff radio
F-2 155.370 LERN

FIRE
F-1 154.190 Dispatch and Operations (dispatched by a Lewis County dispatcher)

OTHER FREQUENCIES OF INTEREST IN GRAYS HARBOR COUNTY

47.70 Public Utility District
48.26 Public Utility District
451.250 Washington Public Power Supply System- Satsop Nuclear Power Plant Security (Sheriff's office can talk to security directly here)
453.400 Grays Harbor Transit Authority (repeater out, input 458.400)
460.075 Pacific County Sheriff's Office (repeater)
155.625 Lewis County Sheriff's Office (repeater)
155.550 Thurston County Sheriff's Office (repeater)

Public Safety-California

Public Safety-California P.O. Box 3962 Santa Fe Springs, California 90670-1962

March 1984 PUBLIC SAFETY CALIFORNIA

The 20th anniversary edition of Police Call Southern California Detail Edition is out. This 1984 issue (pink cover) is accurate and up-to-date. Congratulations to Gene Hughes. At $6.95, it's the same price as last year and can be ordered from Calif. Radio Communications, PO Box 35102, Los Angeles, CA 90035.

From WAYNE (CA-LA-119): KHJ-TV (Los Angeles Ch. 9) is in the process of setting up a single-sideband operation on VHF (known as compander). F1 154.5265 (in) 151.7025 (out); F2 154.5275 (in) 151.7275 (out). The frequencies listed above are roughly correct, but the actual frequency assignment may be different.

Los Cerritos Mall security is confirmed on 464.525. Los Angeles City Hall security is on 37.14. Can someone supply the UCLA Medstar and Western Medical Center of Anaheim helicopter frequencies? Could someone verify Big Bear City fire dept. on 154.325 and Big Bear Lake fire dept. on 154.19? Add Santa Fe Springs #83 CHP on 42.12 B and 42.20 M to your Police Call So. Calif. detail edition. East L.A. #82 CHP is alone on the yellow, 42.52 B and 42.30 M. 143.05MHz is active in So. Cal. and appears to be military tower operations. For a brochure of police patches and low prices on scanners contact Bill Dever, RT2 Box 277C, Hot Springs, Ark 71901.

From KEITH (CA-LA-003): City of Hope Hospital, 151.655. Children's Hospital, 152.0075 maint., 155.22 security. KABC, 26.29 and 26.39.

Which hospital or security company is on 155.175 in Orange County?

Irvine Company Security in Orange county use 855.2875.

Fron ED (CA-RI-013): Ed sent a small brochure on Riverside Countie's Fire Dept. showing State, County and Volunteer Fire stations. I'll send you a copy with your SASE. Unconfirmed to him is that Riverside Co.has a budget item for next year to have an additional Division Chief known as Central Division. This will be in addition to the present Western and Eastern Division now existing. It's not known yet which station he will be based at and it would be a Ranger II position. Also, specs are now being worked on for bids to go out for a number of new engines to keep up with their twenty year replacement plans. Few, if any, new companies will be placed in service because of this purchase. Could be 12 or more new engines, depending upon prices and type of equip. City of Palm Desert, a contract city, wants six more firefighters next year (1984). Here are some interesting figures...
CDF in Riverside Co. has 15 engines with 101 engines under contract with City and County Fire.
CDF in San Bernardino Co. has 13 engines with 56 engines under contract with Co. Fire Protection Districts.
CDF in San Diego Co. has 27 engines and 4 under contract with Co. Fire Protection Districts.
In Riverside Co., in order to reach 101 engines, they have to include the quick attacks and 2 truck companies.
Riverside City is looking at two new Police helicopters that would also have water tanks. Would replace 3 old small Bells. The fire dept. may bid for a new engine soon.

The Aviation section of the San Bernardino County Sheriff's Dept.--flying fixed-wing and helicopters, and armed with advanced infrared devices and hand-held submachine guns--is among the best trained and equipped units of its type in Calif. The size of their county which is bigger than 9 U.S. states and 55 foreign counties, and their terrain caused them to rely on this type of air power. They got five UH-1D "Huey" helicopters at no cost from the Defense Dept. Two are flown and three are cannibalized for parts. Three Hughes jet helicopters were bought with the aid of federal grants. Three of four airplanes were seized in narcotics cases. The Hughes helicopters were replaced as they wore out with later models and now number four.

By arming its helicopter with submachine guns, they have set themselves apart from other departments. (In L.A., helicopter crews carry only revolvers or pistols.) They put a Ruger Mini-14 submachine gun on board after one of their helicopters was forced to land when it was hit by machine gun fire from a fleeing vehicle involved in a bank robbery at a Norco bank in May, 1980. No casualities aboard the helicopter. The sub machine guns are used only to protect the helicopter. Only once have they fired from the air to the ground; a deputy used his sidearm to shoot a mirror off a car that was driven by a former L.A. county deputy sheriff that had robbed a bank and seriously wounded a La Habra police officer. About six years ago, national headlines were made when one of its planes made a shotgun blast into a fleeing drug smugglers plane forcing it to land.

The Aviation division also has an infrared device called FLIR (forward-looking infrared). One thing this device has done was determine who was driving a car used in a crime, when neither of two suspects would admit to driving. Heat residue footprints showed up on a screen and led from the driver's side to the hiding place of one of the suspects. They have also captured burglars at night by scanning an area where a burglary has occurred and noting that for blocks around all of the parked cars have cold engines except one. They stake out the car and wait for the driver suspect to return. Only three other agencies in Texas, Florida, and Virginia have similar infrared devices. LAPD hopes to have this device for use in the 1984 Olympic Games for its value around the Olympic Villages at UCLA and USC for guarding the perimeters and spotting intruders.

Radio identification of the S.B.S.O. Aviation Division:

Station 40 = Aviation facility in Rialto

40 King 1, 2, 3, and 4 = Hughes 500D helicopters used for patrol

40 King 5 and 6 = Bell UH-1B (Huey) copters used for search and rescue

The fleet also includes at least 3 fixed wing aircraft (unknown ID's) some of which formerly belonged to drug smugglers.

From KERRY (CA-SM-013):

In the December 1983 issue of the RCMA Newsletter, Gene CA-SN-004 had a note on the day of 9-19-83 of a bank robbery pursuit on US 101 in San Bruno. He asked if anyone had information to answer back, well, I will try to give all the information I have on the San Mateo County Communication, and the CHP in San Mateo County.

Back in about 1980 San Mateo County revamped their county wide communication system. All the changes were made with each city in the county. The total communcation system is one that each city in San Mateo County has its own channel and se veral other channels (some cities share a channel with one other city) and the San Mateo County Sheriff's Office has 7 channels county wide. The system is set up as Sheriff's primary CH-1 (488.9875) all county areas except East Palo Alto, CH-2 (488.3875) county area East Palo Alto, CH-3 (488.8875) green CH. county wide mutual aid & sheriffs CH-2 (all cities have this channel) CH-4 (488.8625) TAC-1 all northern county PD's, CH-5 (488.7125) TAC-2 central county & PD's, CH-6 (488.5375) TAC-3 all southern county & PD's, CH-7 (488.9875) simplex car to car CH-1.

When this system was installed all of the Sheriff's patrol cars had MT-500 Converta-Comm installed, and each deputy has an MT-500 portable radio. The county has se veral stand-by radios. This is

how we come to the question of how CHP units may have been able to relay directly on the CHP channels any information. The spare radios are used by CHP units in the South County area and the Coast Coast CountY area. The CHP units use some of the spare radios in their patrol units and can talk with the county sheriff's units and with some of the city PD's units. This gives the CHP units the ability to relay information directly on any CHP channel that any CHP partol unit has. This has helped with all types cases both routine and of pursuit cases,thus many of the bad guys don't get far. As of this writing I do not know if the County is using the CHP blue channel directly, but they do have the CHP blue channel in the emergency communications van.

FROM GARY (CA-LA-556)

L.A.P.D. (Includes latest changes)

CENTRAL	DIV. 1	506.7375
RAMPART	DIV. 2	506.9375
SOUTHWEST	DIV. 3	506.9875
HOLLENBECK	DIV. 4	507.1875
HARBOR	DIV. 5	506.7875
HOLLYWOOD	DIV. 6	507.2125
WILSHIRE	DIV. 7	506.9625
WEST. L.A.	DIV. 8	506.7625
VAN NUYS	DIV. 9	506.7125
WEST VALLEY	DIV. 10	506.8875
NORTHEAST	DIV. 11	506.9375
77th ST.	DIV. 12	507.2375
NEWTON	DIV. 13	507.1875
PACIFIC	DIV. 14	506.9625
N. HOLLYWOOD	DIV. 15	507.1625
FOOTHILL	DIV. 16	507.1625
DEVONSHIRE	DIV. 17	506.8875
SOUTHEAST	DIV. 18	506.7875
	TAC. 1	154.83
	TAC. 2	154.77
	TAC. 3	154.995
	SIMP. 4	506.5875
	SIMP. 5	507.2625
	SIMP. 6	506.8125
	SIMP. 7	507.0375

USFS, San Bernardino National Forest F5 = 169.925

An unknown agency was heard on CLEMARS (154.92) searching for Chino Hills murder suspect refer to 155.475 as "brown". Nothing was heard on 155.475.

From Hugh (CA-LA-472); Anyone hear W5LFL/Space Ship mobile down there? I made tapes of him on five occasions, but I doubt if anyone in L.A. without space communications antennas got through on his uplink. Receiver in all cases was the Bearcat 250. Wonder if Bearcat would let me do an endorsement? (First scanner into space?)
Tell Tom (CA-LA-475) that LAFD Channel 4 is, if anything, more active than ever. It's the main rescue freq. for all but the Valley. The repeaters aren't linked, and if a call isn't in your area of the city you won't hear anything. LAFD is using 33.94 (alternate dispatch-ch. 9) a lot. I got to watch LAFD put out our trash bin, and the one carrying the W-T had a speaker mike that could probably survive a direct grenade hit. Unit ID for the W-T's is always "handi-talkie ___", the "___" being the company number, and they always use simplex. The Chief stays on duplex. Thus you don't hear both sides of LAFD fireground traffic unless you're close enough to get in the way anyway.

LAPD is really using the MDT's a lot. I guess the system works - they are really relying on it. Voice traffic is way, way down. You just do not hear the beat cars (do they still call them "basic cars"?) unless

there's a problem with the MDT. What you do hear concerns incident numbers - not very informative. It's fun to watch the officers use their MDT's (when they let you). They really save a lot of time. Anything heard on the Mex-Fly spraying yet? 39.50 is dead here, except last Saturday when I heard a good pursuit in Louisiana! (It's a mutual aid freq. there).

Here's what happened at the Hollywood Christmas Parade - LAPD puts a lot of manpower into this one:

LAPD Tac 1	154.83	air unit/command post 6/traffic
LAPD Metro	506.5875	VIP escort/horse units
LAPD Rover 3	507.2125	Hollywood Division Base Fq. (Div. 6)
" 4	506.5875	"2" units/crime suppression (note all four
" 5	507.2625	"Q" units/CP6 tac fqs. were
" 6	506.8125	"charlie" units-parking and tow-away res-
" 7	507.0375	"Q" units - traffic control tricted)
	35.88	Hollywood Division OPG tow
	153.80	Explorers/traffic control
	147.21	simplex Amateur communications-big net (moved to fq. 4 - anyone know this one?)

Police Call lists Metro Traffic Control on 455.95, but it wasn't until KNX radio (1070 AM) started using their services that I heard anything on it. Now it's in constant use by "KNX Base" and Metro's aircraft during rush hours. Bill Keene is just as humorous an the two-way as over KNX.

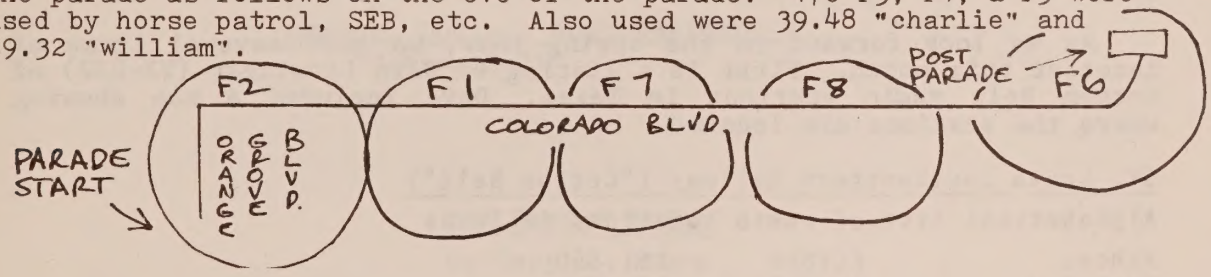
I notice that April 25th is RCMA "bring your shortwave rig" night. I'll move my hallicrafters SX-62A if you'll pay for the forklift and tractor rig. This set is older then I am (unlike most people) and very tired, but still picks up cordless phones like a champ. I hear the latest dodge in L.A. is to drive by a big apartment complex with your cordless phone handset and try to bring up someone else's base station.

Quite a bit of activity on fqs other than those given in the column for the Rose Parade/Bowl. These included 145.12R (pl disabled) and 145.18R (same) as back-up channels, some simulcasting of 147.27 on the 145.54 simplex fq, and references to an "x" channel (145.12?).

From your editors: RACES used the following fqs for the Rose Parade;

F1 147.27R simulcast
F2 145.30R
F3 145.54S back-up
F4 145.18R ATV & back-up

The L.A. County Sheriff's used all of their 470 fqs except 9 & 10 during the parade as follows on the eve of the parade. 470 F3, F4, & F5 were used by horse patrol, SEB, etc. Also used were 39.48 "charlie" and 39.32 "william".



From DAVID (CA-SF-025)

SOUTH SAN FRANCISCO FIRE DEPARTMENT

Frequency Assignments: F1: 154.0100 mhz.
F2: 154.2800 mhz.

Identifiers: CHIEF is C-1; BATTALION CHIEF is BC

FIRE STATION 1: 201 BODEN AVE
ENGINE 1, ENGINE 5, TRUCK 1, B/C VEHICLE

FIRE STATION 2: 249 HARBOR WAY
ENGINE 2, RESERVE ENGINE 1, RESERVE TRUCK 1
CHEMICAL HOSE TRUCK W/ 900 g WATER TENDER

FIRE STATION 3: 33 ARROYO DR
DEPT HQ.: ENGINE 3, RESCUE 1 (PARAMEDIC AMBULANCE)
RESERVE AMBULANCE

FIRE STATION 4: 2350 GALWAY PLACE
ENGINE 4, RESERVE ENGINE 2

FIRE STATION 5: IN PLANNING STAGES (SSFFD ALSO HAS A HAZARDOUS MATERIALS TEAM AND HOPES TO OBTAIN A HAZ MAT VEHICLE FOR THEM SOON.)

UPDATE ON SAN FRANCISCO POLICE DEPARTMENT From DAVID (CA-SF-025)

Identifiers: 1ADAM102 (Police Public Affairs Sergeant)
1TOM112 (Robbery Apprehension Team (RAT) Coordinator)
3SAM series (Patrol Bureau Task Force; created as undercover officers to combat in-progress street crimes)

10-Codes: 10-96 (new code) marked units to stay out of area (requesting unit to specify time element and area)

Housing Police: As a result of the November 1983 city election; the Housing Police were transferred from the Housing Authority to the Police Department; identifiers are still 1Zebra series, but changes are possible.

RAT teams: To combat bank robberies, SFPD, FBI, and banks developed the RAT system. Selected banks have a RAT device that is combined with the "bait" money given to a bank robber. The RAT device sends out a signal that can be followed. Selected marked units called "trackers" have the gear to monitor and follow the RAT signal. Police Headquarters and all district stations also have RAT signal monitoring devices. All police need do is track the signal and hopefully, arrest the 211 suspect. Tracker cars carry antennas allowing communication on both loband and UHF. Tracker cars from all districts will converge to track RAT signals and communications are switched to the appropriate police district frequency. 1TOM112, as RAT Coordinator Sergeant, always responds to coordinate RAT tracking activities.

Railroads

Gary L. Sturm and
Bill Farmer, Editors

Send information about railroad frequencies and their uses, railroad radio system details, and related questions to:

Gary L. Sturm, 1506 W. Hively Ave., Elkart, IN 46517

As we look forward to the spring thaw, we have several items of interest this month. First is a listing by Dave Litsinger (TX-032) of Cotton Belt radio stations in Texas. Dave included a map showing where the stations are located.

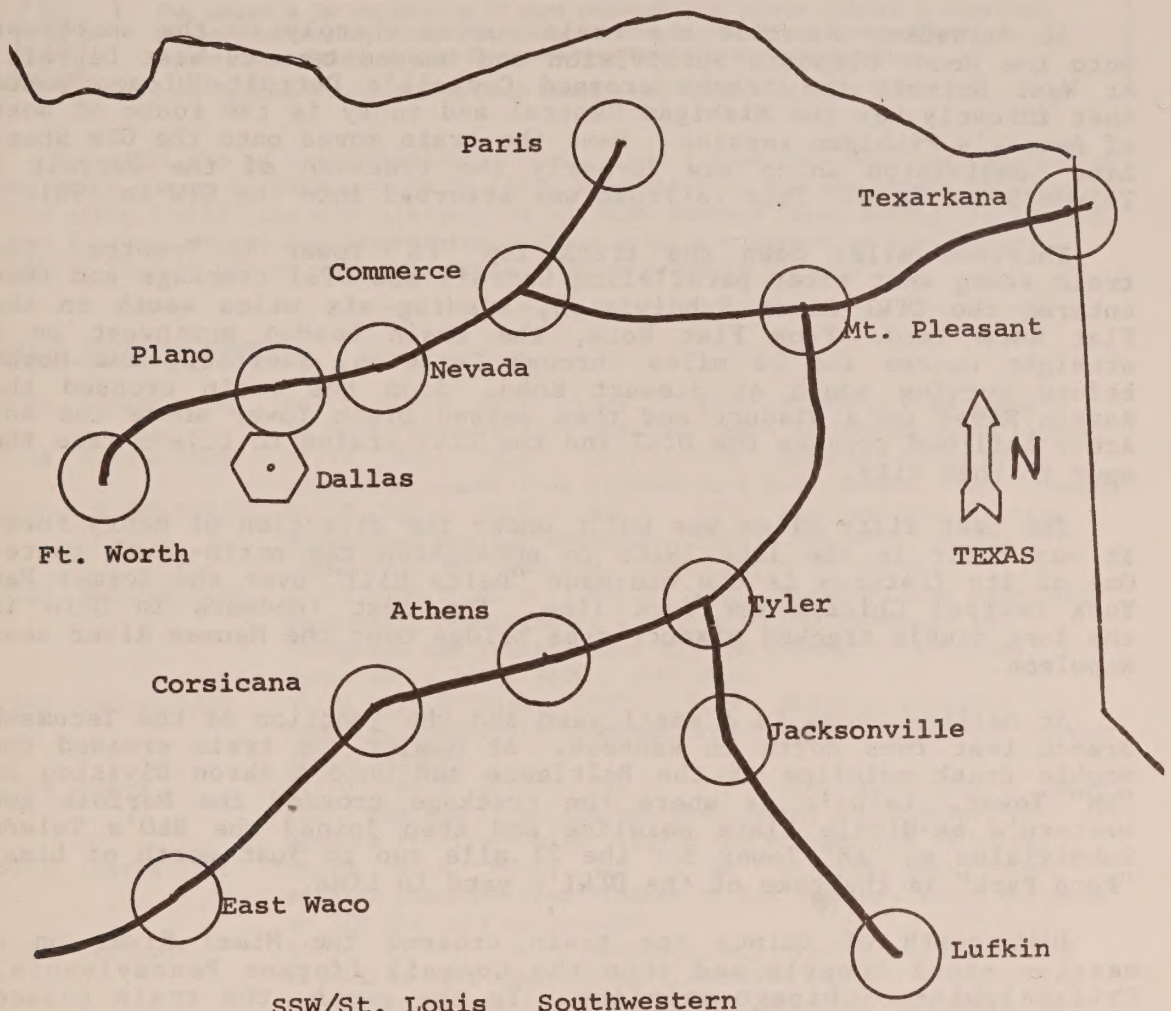
St. Louis Southwestern Railway ("Cotton Belt")

Alphabetical list of radio locations in Texas

Athens	KCV866	161.550	
Commerce	KKZ805	161.550	
Corsicana	KKY237	161.550	SP license
	KJJ793	160.680	PBX output (161.400 input)
	KJJ793	160.800	PBX output (161.490 input)
Dallas	WYH482	160.290	
	KLG664	160.500	PBX output (161.415 input)
	KLG664	161.415	PBX input
	KLG664	161.190	
East Waco	KBR728	161.550	
Ft. Worth	KAS463	161.550	
	KSS903	160.500	PBX output (161.415 input)
	KSS903	161.415	PBX input
Jacksonville	KUE708	161.550	SP license
Lufkin	KVV789	161.550	SP license
Mt. Pleasant	KKZ247	161.550	
	KJJ796	160.680	PBX
	KJJ796	160.800	PBX
Nevada	KTO355	161.550	
Paris	KJV393	161.550	

Railroads continued

Plano	KCV891	161.550	
Texarkana	KLB335	161.550	
	KGQ302	160.500	PBX
	KGQ302	161.190	
Tyler	KKX220	161.550	
	KJJ807	160.680	PBX
	KJJ807	160.800	PBX



SSW/St. Louis Southwestern
"Cotton Belt"

THE DAYTON FLYER

by Gary L. Sturm

October 22, 1983, marked the first time in nearly 50 years that first class varnish had transgressed the Detroit, Toledo, and Ironton Railroad from Detroit to Maitland OH with a connection over the Conrail system to Dayton. It ended nine years of commuter service for the Detroit area under the rule of the South Eastern Michigan Transportation Authority (SEMTA) as service was discontinued. It was also a farewell salute to the DT&I RR whose autonomy faded under the auspices of the Grand Trunk Western Railroad on December 31, 1983, after 78 years of existence.

The train consisted of three General Motors Electro-Motive Division diesel locomotives and 20 passenger cars. Making its debut in service was the Blue Water Chapter of the National Railway Historical Society's full service dining car, "The Lake Michigan". This car was built as the "Washington" by the Budd Company in 1949 for the Atlantic Coast Line. The remainder of the cars were either 4800 series cars built for the Union Pacific or 100 series cars built as roomette sleepers for the Pennsylvania Railroad in 1949.

The route began in Pontiac at the new transportation center opened last spring to accommodate rail and bus service. Between there and Milwaukee Junction in Detroit the train traveled on the GTW Holly Subdivision. Until that week, these tracks saw three weekday commuter trains each day between the northern suburban areas and the Renaissance Center.

At Milwaukee Junction the train curved sharply to the southwest onto the Mount Clements Subdivision and headed towards West Detroit. At West Detroit the tracks crossed Conrail's Detroit-Chicago route that formerly was the Michigan Central and today is the route of most of Amtrak's Michigan service. Next the train moved onto the GTW Shore Line Subdivision which was formerly the trackage of the Detroit & Toledo Shore Line. This railroad was absorbed into the GTW in 1981.

Thirteen miles down the track lay "FN" Tower in Trenton. The train swung west after paralleling Conrail and DT&I trackage and then entered the DT&I River Subdivision, heading six miles south to the Flat Rock Yard. From Flat Rock, the train headed southwest on a straight course for 18 miles through Carleton, Scofield, and Maybe before curving south at Stewart Road. Soon the train crossed the Raisin River on a viaduct and then passed Diann Tower where the Ann Arbor Railroad crosses the DT&I and the DT&I trains to toledo take the spur to that city.

The next fifty miles was built under the direction of Henry Ford. It was built in the late 1920s to straighten the north-south route. One of its features is the man-made "Delta Hill" over the former New York Central Chicago-New York line. The next landmark in Ohio is the long double tracked viaduct-type bridge over the Maumee River near Napoleon.

At Malinta there is a small yard and the junction of the Tecumseh Branch that runs north to Wauseon. At Hamler the train crossed the double track mainline of the Baltimore and Ohio's Akron Division at "HM" Tower. Leipsic is where the trackage crossed the Norfolk and Western's ex-Nickle Plate mainline and then joined the B&O's Toledo Subdivision at "XN" Tower for the 21 mile run to just north of Lima. "Ford Park" is the name of the DT&I's yard in Lima.

Just north of Quincy the train crossed the Miami River on a massive steel trestle and then the Conrail (former Pennsylvania) Philadelphia-to-Chicago mainline. To the south, the train passed Kiser Lake State Park and in a few minutes entered St. Paris where the trackage crossed under another Conrail line and headed southeast into Tremont City. At Maitland the train curved southwest onto the Conrail former Erie-Lackawanna Railroad line for the 15 mile trip into the Dayton suburb of Fairborn. Dayton is the home of Wright-Patterson AFB and the largest aircraft museum in the world. The remainder of the trip was by buses to the AFB and museum.

Larry (MI-001) partook of this trip and forwarded the brochure from the journey to me. Larry said that nearly 1400 persons were on the trip that day and that people were all along the right-of-way taking pictures of the train on this once in a lifetime occurrence. Bill and I wish to thank Larry for sending us this information on the trip. Following are some radio frequencies that Larry listened to on the trip with the aid of his BC-100.

161.220 DT&I Ch 1 Road
161.430 DT&I Ch 2 Yard
161.340 DT&I Ch 3 Hump at Flat Rock Yard
160.470 GTW Police
161.280 Detroit RR Mutual Aid for Police
160.590 GTW Ch 1 Road
160.530 GTW Ch 2 Dispatcher
160.845 GTW Ch 3 Yard
160.800 CR Road #1

So long until next month,

—Gary & Bill

This column is for the exchange of space communications systems (manned or unmanned), frequency information, orbital data, hobby receiving equipment and antennas. Questions and column input pertaining to Space Communications Monitoring should be sent to:

Larry Van Horn (TN-014),1111 N. Carrier Pkwy., B-107, Grand Prairie, Texas 75050.

The W5LFL Ham in Space Mission is history and I hope that each and everyone of you had a chance to hear or work Dr. Owen Garriott from the spacecraft Colombia. This month I will file a preliminary on how RCMA members fared during the mission. Also I have a report courtesy of the Amateur Satellite Report on the mission. Without further ado on with this month's Space Activity Report.

SPACE ACTIVITY REPORT

111A	Cosmos 1508	11/11	108.1	82.9	1879	423 Mission: This appears to be a failed NAVSAT mission. Xmsn: if NAVSAT check 150Mhz.
112A	Cosmos 1509	11/17	89.6	72.8	312	233 Mission: Photo Recon satellite launch from Plestek on a A-2 booster. Xmsn: unknown
113A	US OPS 1294	11/18	101.4	98.7	844	821 Mission: US Military Block 5D-2 Weather satellite, XMSN: 136.770, 137.500, 137 .620, 137.770, 1698.000, 1702.5000, 1707.000 Mhz.
114A	Molniya 1-59	11/23	726.0	62.9	39821	604 Mission: Comm satellite supporting operation of a long distance telephone and telegraph and transmission of USSR Central TV programs. Xmsn: 800 - 1000, 3400 - 4100 Mhz.
115A	Cosmos 1510	11/24	116.0	73.6	1537	1489 Mission: Possible Geodetic spacecraft launched from Plestek via the C-1 booster Xmsn: unknown
116A	STS-9	11/28	89.9	57.01	294	275 Mission: Flight of Space lab 1 and the first six man crew. Xmsn: see October, 82 Special Profile-- plus 145.55o Mhz amateur ops by W5LFL.
117A	Cosmos 1511	11/30	89.6	67.0	346	192 Mission: Photo Recon mission launched from Plestek on A-2 booster, Xmsn: Centered on 240 Mhz only on command.
118A	Gorizont 8	11/30	1436	0.1	Geostationary	Mission: Communication satellite with improved multibarreled onboard transmitting apparatus intended to support telephone and telegraph radio communication and transmission of television programs. Xmsn: 3.4 to 3.9 Mhz.

W5LFL Launches First Ham-in-Space Operation

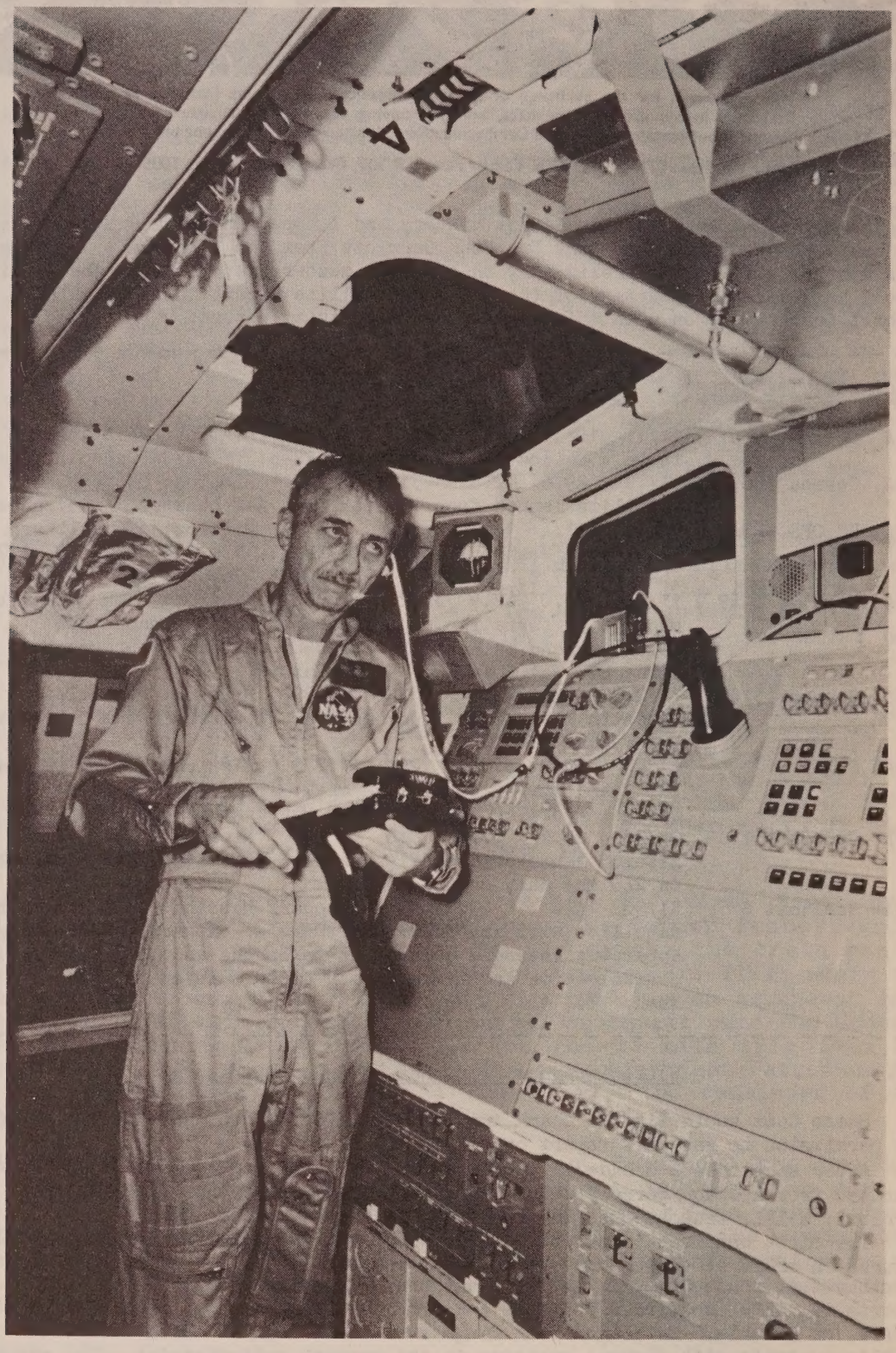
Space Comm would like to thank Amateur Satellite Report, Wolcott, Ct 06716 for permission to use this report on W5LFL.

After more than a decade in planning the first amateur radio station to be operated from a space-borne platform is a reality. NASA Mission Specialist Dr. Owen Garriott, W5LFL, thus becomes the first active ham-in-space.

The first confirmed contacts between W5LFL and hams on terra firma probably occured on orbit #40 Wednesday evening. 01 December 1983. The orbit passing from northwest to southeast off the U.S. West Coast was widely monitored. First reports to ASR of confirmed contacts came from AMSAT area coordinator Jim Smith KA7APJ, of Seattle. He played recordings over the telephone which documented W5LFL's contacts with several stations in the seventh call district. The signal heard by Smith was strong and steady.

Earlier reports of contacts made on orbit #35 remain unconfirmed although widely reported by usually reliable west coast sources.

By the time orbit #96 zipped up the east coast on Sunday morning at 8:30 AM EST, thousands had managed to snatch a fleeting second or more of W5LFL's voice from the Space Shuttle Colombia. Apparently far fewer than anticipated have heard their calls acknowledged. Dr. Garriott has explained on the air several times that he is hampered by the background noise in the shuttle and by not having but a single earphone which leaves the other ear uncovered. Nevertheless, dozens of contacts have been confirmed. AMSAT regular K4GFG of Florida was one



Astronaut Dr. Owen Garriott tests the radio and antenna to be used on board the Columbia during the Amateur Radio operation on STS-9. Dr. Garriott, whose call sign is W5LFL, is holding the clipboard he will use to log the stations he talks with during his off-duty hours chats. The radio is nested in the window immediately to his left, while the antenna is enclosed in the box mounted to the window above and forward of Dr. Garriott. These tests were conducted earlier this year in the Shuttle Simulator at Johnson Space Center in Houston, TX. (NASA photo)

whose call was read by W5LFL and recorded at AMSAT member WA2LQQ.

Meanwhile Associated Press accounts report that King Hussein of Jordan, also known as JY1, engaged W5LFL in a 4 minute QSO early on Sunday 4 December. Sources indicate it probably was orbit # 91 which passed over Jordan at 0607 UTC on Sunday. His majesty and Dr. Garriott were said to have exchanged pleasantries and shared in the pride of bringing the hobby of ham radio into space with W5LFL. King Hussein has been an ardent supporter of the amateur space program. In 1981 he donated $10,000 to AMSAT during a trip to the U. S. that included a telephone call to AMSAT President Ton Clark W3IWI.

Signals received from Dr. Garriott's HT were excellent copy on the ground as most reported full quieting signals whenever W5LFL was heard. Confusion was evident on the ground however, as ill-informed (I really wonder how--ed) ultra-lids repeatedly called on the downlink frequency, 145.55. The lids and n'er-do-wells were immediately pounced upon by a score of would be spectral policeman each of whom, in turn, was accosted by a covey of airborne philosophers discounting the value of berating or disciplining the original intruder. By our reckoning the leverage exerted by a single lid had never been higher. A single syllable uttered out of turn on 145.55 catalyzed a torrent of discipline and philosophy which grew exponentially. Only minutes later would tranquility be restored. Then, it would seem, someone would sigh a sigh of relief into a hair-trigger VOX... and inadvertantly launch another amateur radio chain reaction detonation. Ah, the sociologist!

More troubling, it seems, than the ultra-lids, were the super-hogs and nihilist, mostly in California, who largely succeeded in converting the tremendous leverage afforded them into total mahem. Here one found the perfect amateur radio soup. Take 50,000 radios. Spread them amoung 40,000 competent operators, 8,000 beginners, 150 incompetents, 300 Neanderthals and 200 anarchist/nihilist types. Mix slowly for several days under a strong on-shore breeze and what've you got? Los Angeles, naturlick!

East Coast Garriott-watchers did not go unscathed or unabused. New York probably makes up for the number of free spirits found in L.A. environs with a higher percentage per capita lid rate than most places. Chaos was the rule in N.Y. as well with threats, counter-threats and visions of black-hatted hoodlums taking to the highways to meet out some vengeance contracted for by Cosa Nostra types.

Amateur Radio coverage of the event has been excellent with professional quality, on-the-air, services rendered by WA3NAN, W5RRR and W6VIO. The station at W1AW has carried a basket of W5LFL bulletins as well. WA3NAN (3860, 7185, 14295, 21390, and 28650 -- Ed) at the Goddard Space Flight Center in Greenbelt, Md. has been on the air on HF and VHF with NASA-sourced Shuttle audio feeds. These apparently have had a huge following.(This was a great way for the average listner to follow the flight. The folks at Goddard deserve a fine RCMA round of applause for their efforts to allow the ham and SWL community a chance to follow the mission via shortwave. If you used this service drop them a note of thanks. I'm sure they will appreciate the kind words and this might help get future missions broadcast. -- Ed) The 500 watt VHF FM signal on 147.45 Mhz was audible well up and down the east coast. Likewise the club stations at W5RRR (Houston, Johnson Space Center) and W6VIO (Pasadena, Jet Propulsion Laboratory) served large listener communities for nearly the entire mission. The effort was most impressive and probably marks the high point in coverage of these types of missions.

QSO and SWL reports should be sent to ARRL, 225 Main Street, Newington, CT 06111. You must include a business size SASE. Mark the outer envelope "STS-9" and indicate either "QSO report" or "SWL Report".

With the ham-in-space mission of Owen K. Garriott, W5LFL now complete one is tempted to offer assesments as to the merits of it all. Recognizing that history requires the added perspective of time to obtain clear focus, it seems W5LFL will have succeeded in his most fundemental endeavor. He will in the end have reached millions of otherwise ambivalent youngsters with the notion that amateur radio is not necesarily an end unto itself. Seen in the correct perspective it can become a mode for channeling creative, youthful energies into productive technical careers. This was Garriott's message. We perceive that much of the substance will have gotten through...albeit by a circuitous and often tortuous route. And so the years of planning by W3XO, W3AVI, K6DUE, W4KFC and scores of others appears, at this juncture, to have succeeded.

RCMA W5LFL Notes

I got a card from Hugh Stegman, NV6H/CA-LA-472, during the mission. Hugh said he had copied W5LFL on 3 passes as of Dec.6. These were orbits 56D (12/1 1812PST), 71D (12/2 1642PST), and 130A (12/6 0812 PST). Hugh says he was full quieting the first time and only clear on the other two. Traffic Hugh monitored included calls of CQ North America, This is W5LFL, aboard the spacecraft Colombia. Hugh noted that Owen was reading back calls heard. Hugh said no his wasn't one read back, hi. Neither was mine Hugh, Hi. Hugh received Owen on a Bearcat 250 using various outdoor antennas and out of band programming for 145.550 Mhz. I'll be looking for an update soon Hugh.

I really enjoyed the W5LFL operation. Using the Timex Sinclair 1000, I had tracking data on every orbit over the Dallas/Ft. Worth Metroplex. Believe me and my wife when I tell you I was listening/calling every pass of Dallas. I did note at the beginning of the mission the Shuttle audio was being broadcast via the Patrick AFB MUX system on the high order wire frequency at 20.197 Mhz LSB But after about the fourth day or so (they all ran together for me) that frequency was no longer used. Those with OSCAR 10 frequency capability heard audio from the Shuttle transmitted via Special Service channel H2 -- 145.962 Mhz USB when OSCAR was in view of the states.

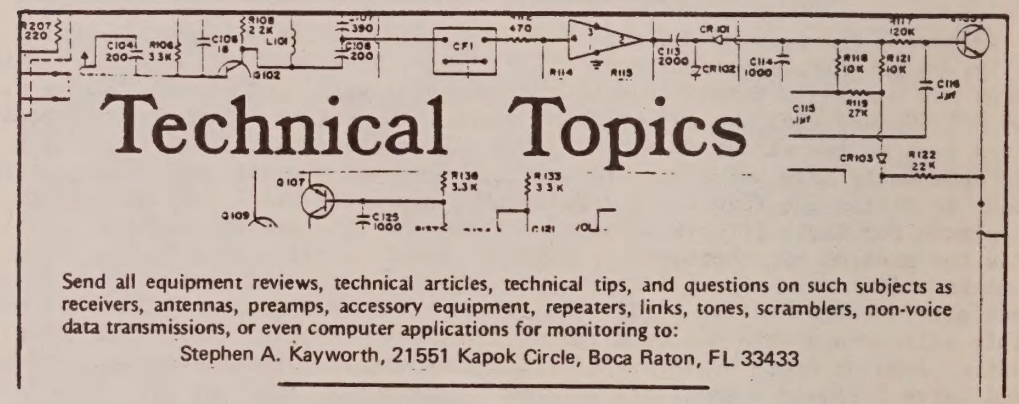
All in all this was a very interesting mission and I hope each and every member of the RCMA had a chance to participate in the fun. Be sure to drop me a line and let me know how your operations went.

* * *

During the shuttle mission the NASA contract channel was up on RCA Satcom F1 via channel 11 with continous coverage. TVRO freaks take note for future missions.

* * *

Well enough of the last shuttle mission for this issue. Next month I'll present more in the weather satellite series and the latest space activity report. Alot of material that went on hold due to the W5LFL wrapup this month. Till next month I hope that the STS-9 QSL will find it's way to your mail box. 73's



Send all equipment reviews, technical articles, technical tips, and questions on such subjects as receivers, antennas, preamps, accessory equipment, repeaters, links, tones, scramblers, non-voice data transmissions, or even computer applications for monitoring to:

Stephen A. Kayworth, 21551 Kapok Circle, Boca Raton, FL 33433

LIFE WITH A 'CAT IN THE HOUSE
THE BEARCAT 250

A few years ago the radio shop where I work was burglarized and among the items taken, was our Bearcat 250. There was a police investigation, but we never expected to see our scanner again. About two years later upon arriving for work one morning, I found a paper grocery bag on the front step of the shop. Not knowing what to expect, I carefully opened the bag and there, to my surprise, was the long-lost Bearcat. I recognized it immediately because of a familiar melted spot in the plastic near the volume control where I had once laid a hot soldering iron. To this day, we have never had any clues as to why the scanner was returned, but we like to think that the thief had a change of heart, saw the error of his ways, and tried to make amends. Needless to say, we were thrilled to get our scanner back. By now you have probably guessed that this month's column will be dealing with the Bearcat 250. I have been receiving a lot of mail about this popular scanner and I think that some of the questions and information they have contained would be of interest to a great many of you. This month I would like to cover two subjects. The first concerns the built-in channel spacing found in the various scanning ranges, and the second has to do with out-of-band scanning. I will finish next month with a discussion about the auxiliary function, a description of a remote "manual/scan" switch, and conclude with a discussion about general problems and possible cures.

Channel Spacing

I recently received a letter from Albert in Brooksville, Florida asking about a problem he was having entering frequencies into his scanner on the UHF band. As certain frequencies were entered via the keypad, another frequency would be displayed after pressing the enter key. The following table gives an example of the problem:

Frequencies Programmed	Frequency Displayed
420.450 thru 420.468 MHz	420.450 MHz
420.469 thru 420.493 MHz	420.475 MHz
420.494 thru 420.518 MHz	420.500 MHz
420.519 thru 420.543 MHz	420.525 MHz
420.544 thru 420.568 MHz	420.550 MHz

This pattern can be found throughout the entire UHF band, and Albert wanted to know if this type of operation was normal or not.

I entered some of the frequencies in my BC 250, which Albert listed, and came up with the same results. For a better understanding of what's going on, try the following: Set-up your scanner to search 420 MHz to 470 MHz. Next, disconnect the antenna and open the squelch all the way (squelch knob fully clockwise). You should now be hearing roaring noise. Finally, hit the search "up" button once and jot down the frequency shown on the display. Hit the search "up" button once again and note the new frequency displayed. Continue this procedure about ten more times and you will begin to see a pattern. You should have a list that starts to look like this:

420.025
420.050
420.075
420.100
420.125

Notice that the three digits to the right of the decimal point increase in increments of 25 kHz. This is the normal channel spacing that is built into the Bearcat 250 on the UHF band. Any frequency you enter will automatically be translated to one of the 25 kHz increments. After doing some simple arithmetic, I concluded that the frequency range around each increment is +18 kHz and -6 kHz. This means, for example, that for any frequency you enter from 420.494 MHz (-6) to 420.518 MHz (+18), the display will read 420.500 MHz, and in fact, this is the frequency that you will be receiving. This channel spacing is built into the scanner and cannot be changed in any way that I know of. For most of you, this should not be a problem, though, since the normal channel spacing for much of what you will listen to on UHF is spaced in 25 kHz increments anyway. I have had some minor problems programming certain frequencies due to this, but on the whole, I don't find it to be a serious hindrance to my monitoring.

You can try the same procedure to determine the built-in channel spacing for the other bands too. What you will find is that from 30 to 50 MHz, the spacing is 10 kHz, and from 146 to 174 MHz, the spacing is 5 kHz.

Out-of-Band Scanning

I first became interested in out-of-band monitoring when I discovered that my scanner wouldn't cover any of the amateur frequencies above 50 MHz or below 146 MHz. As most of you know, the stated band limits are:

32 to 50 MHz
146 to 174 MHz
420 to 470 MHz
470.0125 to 512.0125 MHz

So far, I have discovered two ways to monitor beyond these stated band limits. The first was supplied in a letter I received from Ed (MD-082) suggesting one solution to this problem. Ed writes:

> I recently met a ham who wanted to unload his Bearcat 250 ... because he couldn't listen to 144-146 MHz. These frequencies were beyond the units programming limits....He was soon amazed to hear this band after figuring out the right "images."

Ed states that the Bearcat's IF (intermediate frequency) is 10.8 MHz, and to find the image frequency, you merely multiply the IF by 2 and add it to the frequency you want to monitor. If the

image frequency is within the band limits of the scanner, then you're in luck! If you want to monitor 145.5 MHz, for example, you would add 21.6 to 145.5. Program the sum - 167.1 MHz - into the scanner, and you should now be able to monitor 145.500 MHz on the image frequency.

Don't forget that you will also be able to hear anything that also happens to be on 167.1 MHz. Ed also reminds us that the sensitivity of the receiver will be reduced when you are using the scanner in this fashion, so don't expect your reception to be as good as when you are monitoring within the normal bands.

The second method that I discovered for out-of-band monitoring is a little more involved and requires some fancy keypad entries, but once you do it a few times, it becomes easy. In an article titled "Out of Bounds," in Scanning Today, author James Arconati describes the following method for monitoring and storing frequencies which are beyond the Bearcat's band limits:

> The method consists of using the SEARCH mode, RECALLing a frequency from the STORE memory that is outside of the search limits, and then searching up or down from there.

There are actually sixteen steps - some of which differ depending on whether you want to monitor above or below a band. Whenever a step differs for this reason, I will use the form of "above/below" to show the difference. Any information shown to the left of the slash bar pertains to scanning above the band edge, and anything to the the right of the slash bar pertains to scanning below the band edge.

1. Set up search **limits** near the top/bottom of the band edge to be crossed.
2. Search this area in either direction.
3. Open the squelch to stop the search.
4. Push the **lockout** button. This will store the frequency in memory but not display it.
5. Set new search limits below/above the frequency stored in step 4.
6. Push **manual** button.
7. Push **recall** button. (ed. note: if there is more than one frequency stored in the search memory, then keep pressing recall until the frequency found in step 4 isdisplayed
8. **Search** upward/downward to go past the top/bottom band edge
9. Use slow search speed for ease in stopping at desired frequency.
10. To stop search at any point, open squelch knob.
11. Push **lockout** which will store frequencies in memory for recall.
12. Select the channel for this frequency to be stored in.
13. Push **recall** to retrieve the frequency.
14. Open the squelch.
15. Turn the radio off.
16. Turn the radio back on. You should be able to find the out-of-band frequency stored in the selected channel.

From: SCANNING TODAY (date unknown). Author: James Arconati

These two methods for monitoring beyond the band edges are easy since no modification or extra equipment is necessary, but how well do they work? I had a problem evaluating the first method of listening on the image frequency. I tried to monitor a local amateur repeater on 145.29 MHz, but I couldn't hear a thing, yet, Ed's letter indicates that the method worked fine for him, so it's possible that I have a problem with my scanner that I am not aware of. I would like to know what kind of results you have with this method.

The second method worked well for me and the results were very interesting. The first thing I did was to determine just how far beyond the band edges the display would go. Table 1 shows those results:

Low Band:	10.850	to	32.0 MHz
	50.0	to	51.8 MHz
High Band:	143.850	to	146.0 MHz
	174.0	to	184.805 MHz
UHF:	307.450	to	420.0 MHz
	512.0125	to	512.2375 MHz

Table 1

The added range, especially on low band, seems, at first glance, to be quite impressive, but it turns out that the extended range of the display does not correspond to what the scanner will actually receive. To determine just how far beyond the band edges the scanner would actually receive, I connected a signal generator to the antenna jack and injected a signal at regular frequency intervals until I couldn't receive anymore. Table 2 shows the results of that test:

Low Band:	would not receive below 32.0 MHz		
	50.0	to	51.75 MHz
High Band:	145.45	to	146.0 MHz
	174.0	to	184.75 MHz
UHF:	413.975	to	420.0 MHz
	512.0125	to	512.075 MHz

Table 2

The last test I performed was to measure the sensitivity of the receiver in the out-of-band ranges listed in table 2. I was surprised, but pleased, to find that the sensitivity for 20 db (decibel) of quieting was, in most cases, as good out-of-band as it was in-band. The only exception to this was at the upper end of the high band range.

The 20 db quieting test is a standard test which is used to determine just how well a radio is receiving. It is a measure of how much signal (measured in microvolts) it takes to quiet the roaring squelch noise from the receiver's speaker by 20 db as measured with an AC voltmeter. For scanners in general, this value may fall anywhere from .5 to 1.5 microvolts, depending on the scanner and the frequency being monitored. In most cases, my Bearcat 250 measured near or below the .5 microvolt level. This sensitivity is considered very acceptable in the two-way radio business. Table 3 shows the sensitivity measured for the various out-of-band ranges:

50.0 to 51.1 MHz - - - - - - .25 microvolts
51.1 to 51.75 MHz - - - - - - .275 microvolts
145.45 to 146.0 MHz - - - - .30 microvolts
174.0 to 183.5 MHz - - - - - .22 microvolts
183.6 to 184.75 MHz - - - - .60 microvolts
413.975 to 420.0 MHz - - - .6 Microvolts
512.0125 to 512.075 MHz - - .75 microvolts

A quick glance at table 3 shows that the sensitivity is very good in all of the out-of-band ranges. I was quite impressed by this, since I had expected the sensitivity to drop off beyond the normal ranges.

I have one final thought regarding this second method. While I was scanning between 307.450 through 413.975 MHz, I began to hear various business channels. I suspect that the scanner does receive in this range, but the frequencies on which it receives do not correspond to the frequencies shown on the display. I didn't investigate this range any further than scanning through it a couple of times, but it is deserving of more attention. I'll leave that task open to any of you who are interested in doing a little investigative scanning. Let me know what you discover.

As I mentioned earlier, I'll be concluding this series on the Bearcat 250 next month. In the meantime, I hope you have some fun discovering some new and interesting things about your 'Cat.

****

See you next month,

• Steve (WA4WNE), FL-183

VHF Marine

Send information, articles, frequencies and their use, and questions that relate to private, commercial, and Coast Guard VHF maritime and inland waterways radio communications to:

Emmett L. Baxter, Jr., 424 W. 22nd St., Norfolk, VA 23517

Hello again and welcome to your MARCH 1984 VHF MARINE COLUMN. This month only one letter has been received. The survival of this column depends on INPUT by all of you out there who read this column.So please lets keep this column going full ahead.

Our first report comes from David (La.-031). He sends us the following information.
171.375 - Tybee Coast Guard Lightstation remote control transmitting frequency.
165.275 - Tybee Coast Guard Lightstation remote control receiving frequency.
171.3375 - New Orleans Communications Center transmitting frequency to New Orleans Communications Station.
165.2625 - New Orleans Communications Station transmitting frequency to New Orleans communications Center.
164.9875 - Aviation Training Center - Mobile,Alabama.

Our next report area covers the Gulf Coast of Texas.
HOUSTON:

Dixie Carriers,Inc. - KEA - 156.250,156.800,157.025
Western Towing Co. KLU-717 - 156.250,156.500,156.800,157.025
Zodiac Offshore Inc. - WBD - 156.275,156.350,156.800
Puerto Rico Marine - WRV-576 - 156.275,156.800,156.975
E.P.T.M.USA,Inc. - KJA-278 - 156.350,156.800
G. & H. Towing Co. - KKU-743 - 156.350,156.700,156.800
ITT World Communications - KTD-516/KZH-371 - 156.350,156.500,156.800
Fuel Oil Supply - KZJ-405/WRD-765 - 156.350,156.800
Fosti-Midstream Fuel - WQA-227 - 156.350,156.700,156.800
Buffalo Marine Service - WQA-261 - 156.350,156.800
Baytex Marine - WQZ-288 - 156.350,156.800
Rabs Marine - WRD-719 - 156.350,156.800
Ocean Transportation - WRV-385 - 156.350,156.800
Raytheon Marine - KZN-528 - 156.425,156.450,156.800
Arco Communications - KCD-990 - 156.450,156.800
Halls Food Supply - KMC-301 - 156.450,156.800
Texas Electronics - KUE-676 - 156.450,156.800,156.900
National Marine Service - KWC - 156.450,156.800,156.975
Norwegian Seamans - WQB-360 - 156.450,156.800
Marine Services - WQB-440 - 156.450,156.800
Oil Tanking of Texas - WQZ-211 - 156.450,156.800
Muskgrove - WRV-448 - 156.450,156.800
Tug Communications - WRV-485 - 156.500,156.800
Bibbins & Rice - WQB-860 - 156.55,156.800
Ocean Marine Service - KGA-472 - 156.800,156.900
Canal Freight Lines - KIL-878 - 156.800,157.025
Moran Thibodeaux Shipping - KIL-912 - 156.800,156.900
Brown & Root - KMB - 156.800,156.900
Parker Brothers - KSK-235 - 156.800,156.900
Fleeting Service - KSK-329 - 156.800,156.900
GDM Operating Co. - KSM/WQB-467 - 156.800,156.950
American Offshore - KSU - 156.800,156.900
McDonough Co. - KTD-488 - 156.800,156.900
J & S Supplier - KTR-924 - 156.800,156.900
Coastal Towing - KVF-918 - 156.800,157.025
Wendler Marine Service - WFT/WRD-629 - 156.800,156.900
Any Time Limousine - WHD-635 - 156.800,156.900
Petroleum Salvage - WQB-433 - 156.800,156.975
Gulf Oil Communications - WQB-500 - 156.800,156.975
San Jacinto Fueling - WQB-516 - 156.800,156.950
Angelina Towing Co. - WQX-711 - 156.800,157.025
Cheniere Marine Service - WRD-769 - 156.800,157.025

COAST GUARD UNITS TO LISTEN FOR IN TEXAS AREA:

C.G.Air Station (Large) - Corpus Christi,Texas
C.G.Air Station (Small) - Houston,Texas
C.G.Base - Galveston,Texas
C.G.Marine Safety Office - Port Arthur,Texas
C.G.Marine Safety Office - Corpus Christi,Texas
C.G.Marine Safety Office - Galveston,Texas
C.G.Depot - Corpus Christi,Texas
C.G.Station - Freeport - Freeport,Texas
C.G.Station - Port Aransas - Port Aransas,Texas
C.G.Station - Port Isabel - Port Isabel,Texas
C.G.Station - Port O'Connor - Port O'Connor,Texas
C.G.Station - Sabine - Sabine,Texas
C.G.Vessel Traffic Service - Houseton/Galveston - Galena Park,Tx.
C.G.Loran "C" Station - Raymondville - Raymondville,Texas
C.G.Group Office - Galveston - Galveston,Texas
C.G.Group Office - Corpus Christi - Corpus Christi,Texas

COAST GUARD VESSELS TO LISTEN FOR IN THE TEXAS AREA:

U.S.C.G.C.DURABLE - Medium Endurance Cutter - Brownsville,Texas
U.S.C.G.C.VALIANT - Medium Endurance Cutter - Galveston,Texas
U.S.C.G.C.POINT BAKER - 82'Patrol Craft - Port Aransas,Texas
U.S.C.G.C.POINT HOPE - 82'Patrol Craft - Sabine,Texas
U.S.C.G.C.POINT MONROE - 82'Patrol Craft - Freeport,Texas
U.S.C.G.C.POINT NOWELL - 82'Patrol Craft - Port Isabel,Texas
U.S.C.G.C.BUTTONWOOD - Seagoing Buoy Tender - Galveston,Texas
U.S.C.G.C.ANVIL - 75'Inland Construction Tender-Galveston,Texas
U.S.C.G.C.HATCHET - 75'Inland Construction Tender-Galveston,Texas
U.S.C.G.C.MALLETT - 75'Inland Construction Tender-Corpus Christi,Tx

Texas Marine Operators:

Ch.24 - Coast-161.800 -	Ship-157.200 -	KXD-742 -	LaMargue,Tx.
Ch.25 - Coast-161.850 -	Ship-157.250 -	KGW-304 -	Freeport,Tx.
			Bay City,Tx.
Ch.26 - Coast-161.900 -	Ship-157.300 -	KLG-376 -	Brownsville,Tx.
		KWB-424 -	Corpus Christi,Tx.
		KGW-295 -	Port Lavaca,Tx.
		KKD-739 -	LaPorte,Tx.
		KKD-741 -	Port Arthur,Tx.
Ch.27 - Coast-161.950 -	Ship-157.350 -	KGW-304 -	Freeport,Tx.
			Bay City,Tx.
		KKD-741 -	Port Arthur,Tx.
Ch.28 - Coast-162.00 -	Ship-157.400 -	KKD-742 -	LaMargue,Tx.

Coast Guard Marine Information Broadcasts on 157.100 Mhz.

C.G.Group Galveston,Texas - 1050,1250,1650,2250 GMT
C.G.Group Corpus Christi,Texas (Via Port Isabel Station)
1045,1645,2245 GMT
(Via Port Aransas Station)
1040,1640,2240 GMT

C.G. VHF-FM Coverage Chart (Remote Transmitter/Receiver Sites):

C.G.Group Galveston,Texas	Freeport,Tx.
	Galveston,Tx.
	Morgan Point,Tx.
	Houston,Tx.
	Sabine,Tx.
	Cameron,La.
	Pecan Island,La.
C.G.Group Corpus Christi,Texas	Port Isabel,Tx.
	Port Mansfield,Tx.
	Robstown,Tx.
	Port O'Connor,Tx.

Well That's about it for this month. I hope you noticed that information from your area was not in the column. WHY - Because nobody bothered to send it in. Lets fill the mail box this month with anything concerning this column or any questions.

With the Spring Season just around the corner the Marine Activities will be on the upsurge. Make sure you don't miss it.Let me hear from you.

73's till next month.

FOR YOUR INFORMATION...UPDATES ON NEW PRODUCTS:

Bill Farmer (CA-VE-010)

BEARCAT CompuScan™ 2100

This new scanner has no keyboard and no display! Instead, it is programmed by connecting it to your personal computer via an RS-232 interface. There are only two controls on the scanner: on/off/volume and squelch. The unit scan up to 200 channels in selectable banks. There are 3 levels of priority and 4 auxiliary switches to control tape recorders, alarms, etc. It automatically maintains a running count of the number of calls received on each channel. In addition, you can enter up to four lines of memo information about each source, and it will be displayed on your computer's CRT screen when a call is received on that frequency. Search/store/count function is available also.

The unit comes with RS-232 serial interface cable, and custom software is available in cassette and disk versions for many popular computers. Frequency coverage is 29-54, 118-136 Aircraft, 136-174, and 421-512 MHz.

BEARCAT BC-260

The Bearcat 260 is a 16 channel programmable scanner designed for mobile use. It has 3 watts of audio output which most mobile users will appreciate. Coverage includes 406-420 MHz.

FANON HAND-HELD PROGRAMMABLE

Gary J. Mondfrans, owner of Monitor Control in San Bruno, Calif. reports in a letter dated October 21, 1983 that production of this unit has been postponed indefinitely. He says that no working prototypes have been constructed, only mockups for photographic purposes. No other programmables are planned by Fanon-Courier at this time. See RCMA Newsletter, Sept. 1983, page 69 for details on this model.

REGENCY

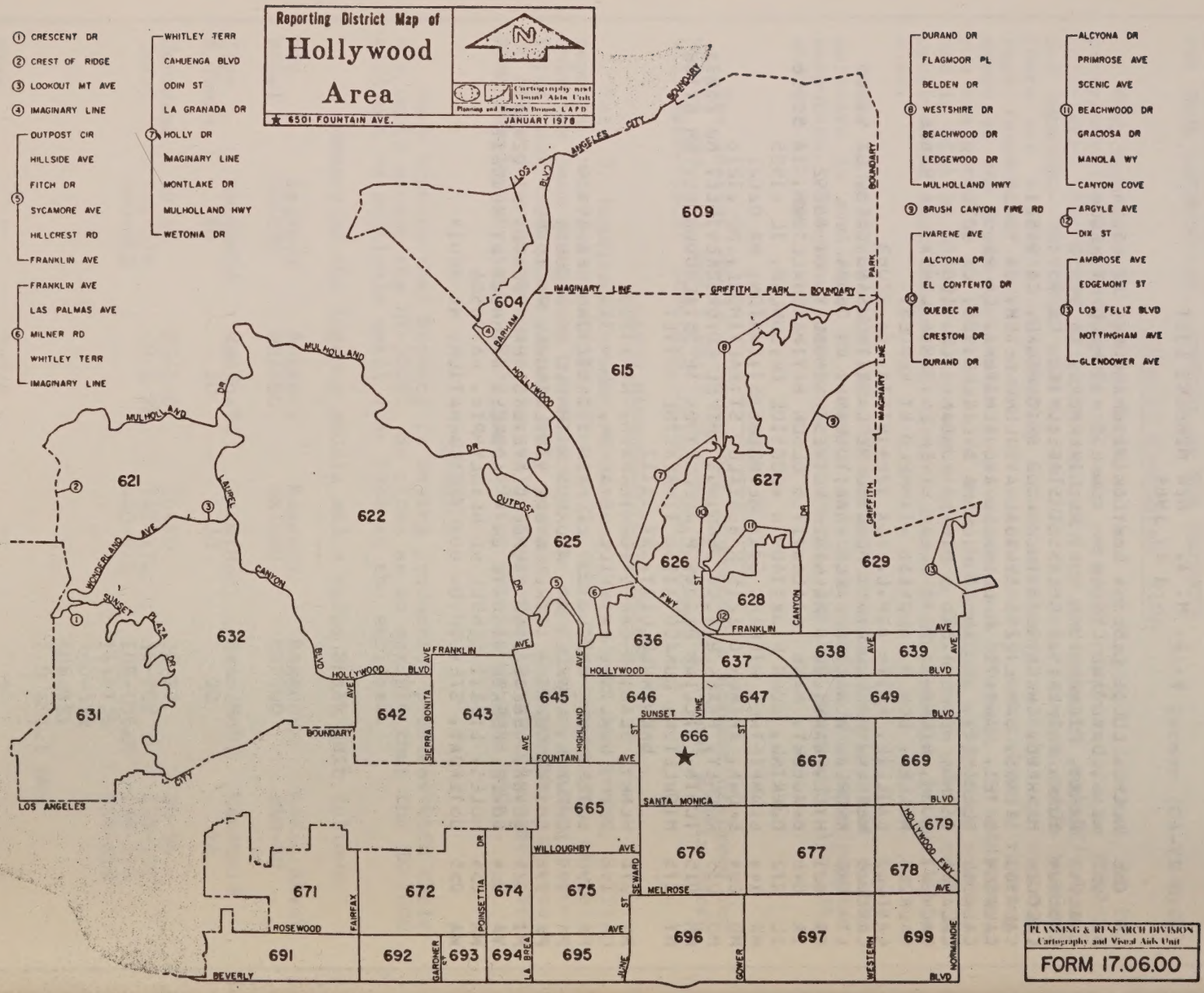
Gary reports that Regency is having production problems with their new units except the MX-3000. He cites as an example that the MX-7000 will not be available until June 1984 at the earliest.

A summary of the Regency models and a Radio Shack unit follows:

Mfr.	Regency	Regency	Regency	Regency	Radio Shack
Model	HX1000	HX3000	MX3000	MX7000	PRO-30
Type	Handheld	Handheld	Base/Mob.	Base/Mob.	Handheld
# Chans.	20	20	30	20	16
Coverage (MHz)	30-50 144-174 440-512	25-550 AM & FM	30-50 144-174 440-512	26-27 30-108 108-136AM 144-174 440-512 806-881 1.0 & 1.1 GHz	30-54 108-136 138-174 380-512
Size	?	2-5/8 x 6-1/2 x 1-1/8	?	?	3 x 7-1/2 x 1-13/16
Retail	$329.95	$449.95	$299.95	$599.95	$299.95
Discounted	$209	$365	$199	$449	—

R. C. M. A. NEW MEMBERS LIST
1 17 1984

AZ 056 NUCHO, LOUIS C;683 W GARY DRIVE;CHANDLER, AZ 85224
AZ 057 WING, DAVE AND CYNDEE * ADDRESS WITHHELD BY REQUEST
CAAL047 PARKS, RICHARD;546 RUBY RD;LIVERMORE, CA 94550
CABU004 YORK, MATHEW;928 CHLASSET STAGE;CHICO, CA 95926
CACC026 MAXWELL, CHUCK;1626 THORNWOOD DR;CONCORD, CA 94521
CALA563 STOKES, SAM E;2266 SENASAC AVE;LONG BEACH, CA 90815
CALA564 GATES, MARK;710 N ELSHNELL AVE;ALHAMBRA, CA 91801
CALA565 GOLDSMITY, LEN;19303 WIERSMA AVE;CERRITOS, CA 90701
CALA566 ISING, HERBERT;816 S 5TH ST;BURBANK, CA 91501
CAOR267 BUSH, RICHARD;20276 CLEAR RIVER LN;YORBA LINDA, CA 92686
CAOR268 WELLER, DON * ADDRESS WITHHELD BY REQUEST
CASD063 BAILLIE, KEITH A;P.O. BOX 1384;VISTA, CA 92083
CAVE026 REINER, HAROLD L;561 HOLLYBORNE LANE;THOUSAND OAKS, CA 91360
CT 080 KNOFLA, ALAN;156 BARUS ROAD;TOLLAND, CT 06084
CT 081 HYDE, GARY;220 W MOUNTAIN RD;WEST SIMSBURY, CT 06092
IA 046 BRADBURY, HANK KIACBJ;1705 OLSON WAY;MARSHALLTOWN, IA 50158
IL 272 DOERING, JOHN F JR;1409 W WOODSIDE DR;DUNLAP, IL 61525
MA 144 GIAMPIETRO, RICHARD L;11 REYNOLDS ST;CANTON, MA 02021
MD 084 BROWN, ARTHUR G;1215 N BENTALOU ST;BALTIMORE, MD 21216
MD 085 RODNEY, FRANK P;4000 JENNINGS CHAPEL RD;BROOKEVILLE, MD 20833
NM 015 TOBIN, WILLIAM H;1309 P WELLSEY DR SE 35;ALBUQUERQUE, NM 87106
NY 275 MIDDLETON, DONALD A;168 TIMBERLINE DRIVE;
BRENTWOOD CITY, NY 11717
NY 276 HENRY, SEAN;65 OAK ST;CENTEREACH, NY 11720
OH 156 DUPP, G.R.;560 FAIRHILL DR;AKRON, OH 44313
PA 196 BOYER, DON WASCUQ;337 E. MAIN ST;KUTZTOWN, PA 19530
PA 197 CHROMIK, CHARLES A* ADDRESS WITHHELD BY REQUEST
PA 198 SMITH, LOUIS A II;RD 6 BOX 479;LATROBE, PA 15650
RI 025 DEVON, GEORGE J;63 CAMPBELL AVE;EAST PROVIDENCE, RI 02916
VA 084 GOWER, PERRIN WINGATE JR * ADDRESS WITHHELD BY REQUEST
WA 054 NOLES, E;5111 LINDEL RD NE;OLYMPIA, WA 98506
WA 055 OSTERDAY, STEVE;P.O. BOX 722;CARNATION, WA 98014


Reporting District Map of
Hollywood
Area
★ 6501 FOUNTAIN AVE.
JANUARY 1978
Cartography and Visual Aids Unit
Planning and Research Division, LAPD
① CRESCENT DR
② CREST OF RIDGE
③ LOOKOUT MT AVE
④ IMAGINARY LINE
⑤ OUTPOST CIR
HILLSIDE AVE
FITCH DR
SYCAMORE AVE
HILLCREST RD
FRANKLIN AVE
⑥ FRANKLIN AVE
LAS PALMAS AVE
MILNER RD
WHITLEY TERR
IMAGINARY LINE
⑦ WHITLEY TERR
CAHUENGA BLVD
ODIN ST
LA GRANADA DR
HOLLY DR
IMAGINARY LINE
MONTLAKE DR
MULHOLLAND HWY
WETONIA DR
⑧ DURAND DR
FLAGMOOR PL
BELDEN DR
WESTSHIRE DR
BEACHWOOD DR
LEDGEWOOD DR
MULHOLLAND HWY
⑨ BRUSH CANYON FIRE RD
⑩ IVARENE AVE
ALCYONA DR
EL CONTENTO DR
QUEBEC DR
CRESTON DR
DURAND DR
⑪ ALCYONA DR
PRIMROSE AVE
SCENIC AVE
BEACHWOOD DR
GRACIOSA DR
MANOLA WY
CANYON COVE
⑫ ARGYLE AVE
DIX ST
⑬ AMBROSE AVE
EDGEMONT ST
LOS FELIZ BLVD
NOTTINGHAM AVE
GLENDOWER AVE
⑭ BURRIAN
609
604
615
621
622
625
627
626
628
629
632
631
636
637
638
639
642
643
645
646
647
649
666
667
669
665
676
677
679
678
671
672
674
675
696
697
699
691
692
693
694
695
IMAGINARY LINE
GRIFFITH PARK BOUNDARY
LOS ANGELES CITY BOUNDARY
MULHOLLAND DR
HOLLYWOOD BLVD
OUTPOST DR
LAUREL CANYON BLVD
WONDERLAND AVE
SUNSET PLAZA DR
FRANKLIN AVE
HOLLYWOOD FWY
SUNSET BLVD
SANTA MONICA BLVD
WILLOUGHBY AVE
MELROSE AVE
ROSEWOOD AVE
BEVERLY BLVD
FOUNTAIN AVE
SIERRA BONITA AVE
HIGHLAND AVE
VINE ST
SEWARD ST
FAIRFAX AVE
POINSETTIA PL
GARDNER ST
LA BREA AVE
JANE ST
GOWER ST
WESTERN AVE
NORMANDIE AVE
LOS ANGELES
PLANNING & RESEARCH DIVISION
Cartography and Visual Aids Unit
FORM 17.06.00

MEMBERSHIP CARDS AND BADGES

RCMA has no badges, decals, or membership cards for sale or distribution. The label on your newsletter is your membership card. While other clubs may have gimmicks or commercial good deals, our 'good deal' is your newsletter. You determine its content because you write it.

MAILING PROCEDURES

The newsletter mailed each month has a cover date for the following month. This practice is followed so that the US Post Office can deliver your issue no later than the first of the month designated on the cover.

New members whose applications are received before the end of the month will begin receiving the newsletter the following month. The first issue will be dated the month after that — as described above.

RENEWAL PROCEDURES

The date printed after the membership number on your newsletter mailing label shows the last month of your current membership. It is important to renew your membership by that date, as promptness on your part ensures uninterrupted delivery of the newsletter.

Renewal checks and new membership applications received by RCMA's General Manager, P.O. Box 542, Silverado, CA 92676, are processed for deposit on a weekly basis. Actual computer updating is done at the end of each month. Therefore, it is possible that your check or money order can be received — and even deposited — and your next issue will contain the statement "renewal overdue" on the mailing label. This simply means that your renewal was received after the cut-off date for runnning updated mailing labels.

PRORATED MEMBERSHIPS

Due to postage costs and other considerations, membership applications or renewals for any sum less than the current rate are prorated accordingly. This means that the renewal date will be due in less than a year. Please do not send more money to finish the year; just renew when your prorated date comes up.

Also because of postage costs, RCMA cannot comply with member requests to supply back issues free of additional charge (see the monthly Calendar section regarding ordering of back issues). If a late renewal results in a missed issue, the newsletter can be ordered from RCMA's secretary.

ADDRESS CHANGES

MEMBER notifications of address changes are also updated at the end of each month. If this type of address change notice arrives after the cut-off date, the mailing label will not reflect the new address until the following month.

The newsletter is mailed 3rd class under a bulk mail permit. When a member's address change is supplied by the POST OFFICE (instead of by the member), the charge to the club is 25¢. Although this fee is supposed to include forwarding of an issue to the new address, the result is often simply a return of the issue to P.O. 4563. The message is clear: when you move, notify RCMA yourself. Don't wait for the Post Office to do it.

SPECIAL FREQUENCY REQUESTS

Get in touch with your local RCMA group (see monthly Calendar section for chapter listings) or use the Contact/Information Wanted column for frequencies in your area. RCMA is not yet set up for national distribution of frequencies, although ultimately, the 'big picture' could include copies of the FCC and IRAC data bases, a fast computer, and software to select and sort in any order.

Contributions of frequencies and other material must be sent to the appropriate newsletter editor. (Editors use their own discretion in printing material sent them by non-members.) Data sent to P.O. Box 4563 is always subject to delay and sometimes cannot be forwarded because of postage costs.

DISCLAIMER

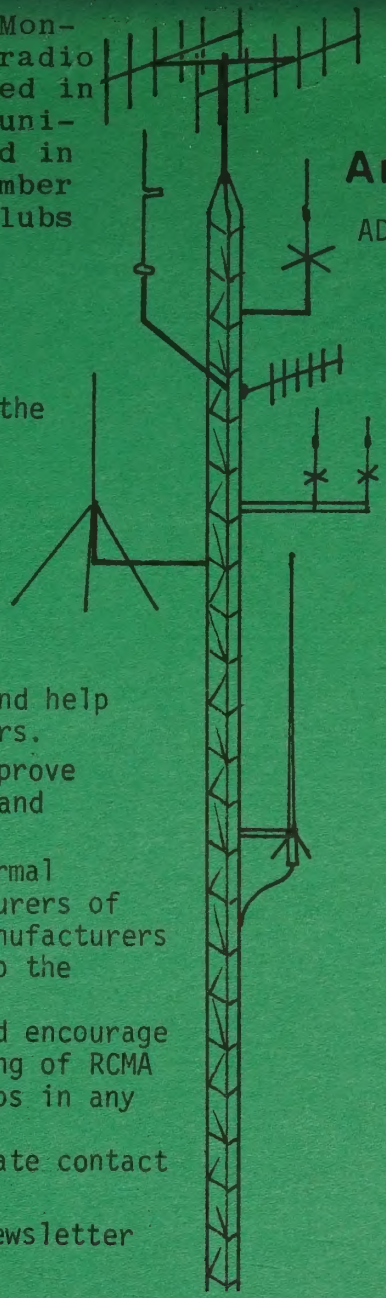
RCMA is a non-profit club for scanner enthusiasts. Neither RCMA or its newsletter are affiliated with, participate in the management of, or are responsible for, any other organization or publication. This disclaimer includes application to POLICE CALL, an annual publication put out by RCMA's good friend Gene Hughes. Queries about this publication cannot be answered by RCMA.

PLEASE REMEMBER — When writing to RCMA for any reason, include your membership number. Use it on your correspondence, checks, or money orders. RCMA tries hard to be responsive to your questions/problems. Using your membership number when you write helps us be of help to you.

The Radio Communications Monitoring Association is a radio club for persons interested in listening to two-way communications. RCMA was founded in May 1975 and is a Full Member of North American Radio Clubs (ANARC).

The goals of RCMA are:

1) To provide a fraternity for those who seriously pursue the hobby of monitor radio listening.
2) To try to be knowledgeable about two-way radio systems and operations.
3) To promote an understanding of the legal and ethical uses of monitor receivers.
4) To share information with and help other monitor radio listeners.
5) To try to understand and improve receivers, antenna systems and related equipment.
6) To offer suggestions and formal recommendations to manufacturers of monitor receivers and to manufacturers of other products related to the hobby.
7) To offer suggestions for and encourage the organizing and conducting of RCMA meetings and tours for groups in any geographic area.
8) To encourage and to facilitate contact between members.
9) To publish a regular club newsletter devoted to the hobby.



RCMA
P.O. Box 4563
Anaheim, CA 92803

ADDRESS CORRECTION REQUESTED

BULK RATE
U. S. POSTAGE
PAID
ANAHEIM, CA 92803
PERMIT NO. 397

NJ 007 04/84
LINZMAYER, WEBB
P.O. BOX 376
MORRIS PLANES, NJ 07950

RUSH -- ITEMS OF NEWS VALUE
TIME VALUE